

DISSERTATION

EXPLORING THE UTILITY OF A ROLLING-ADMISSION DIALECTICAL BEHAVIOR
THERAPY SKILLS GROUP FOR VICTIMS AND SURVIVORS OF INTIMATE PARTNER
VIOLENCE

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ABSTRACT

EXPLORING THE UTILITY OF A ROLLING-ADMISSION DIALECTICAL BEHAVIOR THERAPY SKILLS GROUP FOR VICTIMS AND SURVIVORS OF INTIMATE PARTNER VIOLENCE

Intimate partner violence (IPV) is a significant public health concern for individuals with a breadth of identities in the US. The current study explored the effectiveness of a rolling-admission Dialectical Behavior Therapy (DBT) skills group intervention for individuals who had experienced IPV. The participant sample was made up of 23 victims and survivors of IPV residing in the northern Colorado area. Data were collected at pre-intervention, 24 hours after each intervention, and one month after the final intervention attended for each participant. Participant demographics, PTSD symptoms, positive and negative affect, emotion regulation skills, self-efficacy, social connectedness, and diverse qualitative data were collected. Effect size, idiographic, and qualitative analyses were employed to analyze the data. Results demonstrated that various levels of attendance in a rolling-admission DBT skills group at a domestic violence shelter were associated with qualitative benefits and quantitative improvements on all outcome measures. In addition, participant attendance impacted effects on the outcome measures selected, but not such that participants who attended more interventions saw larger or more effects than those who attended fewer interventions. Finally, the qualitative data elucidated factors which increased the cultural appropriateness of the intervention, enhanced participant motivation, and were broadly considered strengths of the intervention itself. A variety of qualitative recommendations for the group intervention were also provided. Practical recommendations

related to group therapy format and specific interventions are offered. The present study highlights the varying treatment needs of victims and survivors of IPV in relation to time since experiencing IPV-related stressors, symptom acuity, and life instability.

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Introduction

Intimate partner violence (IPV) is a serious public health concern with significant societal consequences and costs (Centers for Disease Control and Prevention [CDC], 2021). IPV, also referred to as domestic violence (DV) or domestic abuse, has been defined by the United Nations (UN) as “a pattern of behavior in any relationship that is used to gain or maintain power and control over an intimate partner. Abuse is physical, sexual, emotional, economic or psychological actions or threats of actions that influence another person” (United Nations, n.d., para. 1). Examples of IPV can include frightening, intimidating, terrorizing, manipulating, hurting, humiliating, blaming, injuring, or wounding another individual (The United States Department of Justice, 2022). Throughout this paper, the terms victim and survivor will be used concurrently to describe those who have experienced IPV, as allowing individuals who have experienced abuse the autonomy to choose their own label supports the development of a differentiated and supportive self-concept (Anderson & Gold, 1994; Thompson, 2000). Moreover, Papendick and Bohner (2017) demonstrated that differing labels following sexual abuse produce varying perceptions from self and others; therefore, a conscious and respectful use of labels is warranted.

Although physically abusive behaviors are most often associated with IPV, most victims and survivors experience a variety of abusive and/or coercive behaviors. These abusive behaviors can include sexual abuse (e.g., marital rape, sexually demeaning another, forced sex after physical violence, etc.), emotional abuse (e.g., constant criticism, name-calling, damaging relationships, undermining self-worth, etc.), economic abuse (e.g., fraud, restricting a person’s access to financial resources, exploiting powers of attorney, guardianship or conservatorship,

etc.), psychological abuse (e.g., intimidation, threatening, destruction of pets or property, etc.), and technological abuse (e.g., use of technology for stalking, monitoring communication, harassing others, etc.; The United States Department of Justice, 2022). Victims and survivors of IPV also often face significant barriers to leaving violent relationships due to the fear of judgment from others, physical and mental health challenges, a lack of social connectedness due to IPV, the lack of support from law enforcement and other government agencies, connectedness to their abuser through children and pets, financial and housing dependence on their abuser, and love or attachment towards their abuser (NCADV: National Coalition Against Domestic Violence, n.d.). In one study, participants experiencing IPV attempted to leave their abusers an average of six times (Gorde et al., 2004). This finding highlights the difficulty that victims and survivors face when attempting to leave a relationship involving IPV.

IPV is thought to be caused and maintained by the constructs of power and control within a relationship (National Domestic Violence Hotline, 2021), with the more powerful partner exerting their control over the other, less-powerful partner (Grose & Grabe, 2014). Individuals, such as men, typically hold more power over other genders, thus creating a predisposition for IPV. However, research has demonstrated that the gender-based violence framework is limited (Merry, 2009). Given that IPV can impact individuals from any gender identity, sex, ethnicity, race, sexual orientation, age, or religion (Alhabib et al., 2010; United Nations, n.d.), more nuanced theoretical frameworks must be considered. Specifically, perspectives which examine the influence of broader cultural and systemic contexts (e.g., the anthropological perspective on gender violence) as well as individual-level factors and experiences (e.g., General Aggression Model; Krahe, 2013; Merry, 2009). Although important, a complete discussion of the theoretical underpinnings of IPV is beyond the scope of this manuscript.

Prevalence of Intimate Partner Violence

Prevalence studies indicate that IPV against women has reached epidemic proportions (Alhabib et al., 2010). A report from the World Health Organization (WHO) found that 30% of women worldwide have experienced physical and/or sexual IPV, with some regions reaching rates as high as 38% (World Health Organization [WHO], 2013). Further, a data brief from a 2015 survey indicated that 1 in 3 women have experienced IPV at least once during their lifetime (Smith et al., 2018). In the United States (US), a large-scale survey indicated that 22.3% of women and 14% of men had experienced severe physical violence by an intimate partner, with 8.8% of women and an estimated 0.5% of men experiencing rape and 15.8% of women and 9.5% of men experiencing other forms of sexual violence by an intimate partner in their lifetimes (Breiding et al., 2014). Another US-based study demonstrated that 32.9% of women and 28.1% of men reported at least one incidence of physical violence from a close romantic or sexual partner, and 15.9% of women and 8.0% of men endorsed experiencing sexual violence (other than rape) from an intimate partner (Walters et al., 2013). Although more recent large-scale prevalence data is not available, several studies have indicated that the COVID-19 pandemic likely increased the rates and severity of IPV worldwide due to widespread stay-at-home orders (Abraham et al., 2022; Boxall et al., 2020; Sharma & Borah, 2022).

Research has demonstrated that individuals holding LGBTQ+ identities are at a higher risk of IPV than their heterosexual and/or cisgender peers (Whitfield et al., 2021). A study by Walters and colleagues (2013) demonstrated that 43.8% of lesbian women and 26.0% of gay men have experienced IPV at least once in their lifetimes. While those identifying as bisexual and transgender consistently report higher lifetime prevalence rates of IPV than their cisgender and other LGBTQ+ identifying peers (Ard & Makadon, 2011; Turell et al., 2018; Walters et al.,

2013). Concerningly, rates of IPV climbed as high as 61.1% in bisexual women, 37.3% in bisexual men, and 31.3% in transgender individuals.

Communities of color are also at a higher risk of experiencing IPV than their white counterparts within the U.S. (Basile et al., 2011). One systematic review of prevalence studies showed that a staggering 70% of Hispanic Latinas in the Southeast region of the US had experienced IPV at least once in their lifetime (Alhabib et al., 2010). While about 47% of Japanese immigrants to North America had experienced physical violence, and 78% had experienced high levels of emotional violence. Findings from Próspero and Kim (2009) indicated that those identifying as Hispanic or Black reported higher rates of physical IPV than their White counterparts, while those with an “Other” racial identity were at a higher risk of endorsing all types of IPV (i.e., physical, sexual, and emotional) than White participants. Moreover, a study examining IPV in same-race and interracial college student relationships found that individuals holding marginalized racial or ethnic identities experienced higher rates of IPV within relationships (Field et al., 2015). More specifically, relationships between two black individuals, a white and a black individual, and two individuals identifying as “other” (most frequently Hispanic or Native American individuals) were significantly more likely to endorse experiences of severe violence within their relationship, than relationships with two white individuals.

Individuals with marginalized intersectional identities, such as those holding marginalized gender, ethnic or racial, and sexual orientation identities, endorse higher rates of IPV than those with more privileged identities (Whitfield et al., 2021). Results from the aforementioned study indicated that individuals identifying as both Black and transgender were six times more likely to endorse emotional IPV, and those unsure of their sexual orientation with an “Other” racial identity were 2.4 times more likely to endorse experiences of physical IPV.

Researchers have theorized that higher rates of IPV amongst marginalized ethnic or racial groups and minoritized gender and sexual orientation populations may stem from increased stress as a result of identity-based discrimination and systemic inequity (Field et al., 2015; Whitfield et al., 2021). It should also be noted that many prevalence studies do not collect information regarding the perpetrators' identities. Therefore, those holding marginalized identities may not be more likely to perpetrate violence but may be at a greater risk of having IPV perpetrated onto them.

Impact of Intimate Partner Violence

Experiences of IPV are associated with a variety of health implications, including HIV infection, sexually transmitted infections (STIs), birthing-related complications (e.g., low birth weight), physical injuries, and death by homicide (WHO, 2013). Concerningly, over half of all homicides of women within the US were perpetrated by past or current intimate partners identifying as men (Jack et al., 2018). Other health impacts identified within the literature include chronic pain, central nervous system issues (e.g., fainting, seizures), gastrointestinal symptoms and disorders (e.g., loss of appetite, chronic irritable bowel syndrome), cardiac symptoms (e.g., hypertension, chest pain), sexual dysfunction (e.g., painful intercourse), and suppressed immune system functioning (Campbell, 2002; Campbell et al., 2002; Coker et al., 2000; Leserman et al., 1998; McCauley et al., 1995; Tollestrup et al., 1999).

Not only can IPV impact the general health of victims and survivors, but it is also associated with debilitating mental health implications. Concerningly, mental health consequences as a result of IPV are associated with worse long-term health outcomes than physical injury, as psychological disorders can make individuals prone to repeat victimization (Alejo, 2014; Hill et al., 2009; McCaw et al., 2007). Howard and colleagues (2010) proposed that individuals with psychological disorders are more likely to be in unsafe environments and

relationships, thus predisposing them to repeat violence. Research has identified depressive disorders, suicidal ideation and attempts, anxiety disorders, sleeping and eating disorders, substance misuse, psychosis, personality disorders, and trauma disorders as consequences of IPV (García-Moreno et al., 2005; Gerlock, 1999; Hawcroft et al., 2019; Howard et al., 2010; McCaw et al., 2007; Scott, 2015; Warshaw et al., 2013; WHO, 2013). Notably, individuals holding minoritized ethnic identities with experiences of IPV demonstrated worse physical and mental health outcomes than their White counterparts (Stockman et al., 2015).

Although the mental health implications of IPV are broad, the most common disorders diagnosed in victims and survivors are major depressive disorder (MDD) and posttraumatic stress disorder (PTSD; Golding, 1999; Marais et al., 1999; Woods, 2005). Considering the devastating functional and psychological impairment associated with PTSD (Bovin et al., 2018; Holowka & Marx, 2012), this consequence is cause for concern.

PTSD is characterized by exposure to actual or threatened death, serious physical injury, or sexual violence via personal exposure, witnessing the event, learning of the event perpetrated unto a loved one, or repeated exposure to the aftermath of the trauma (e.g., first responders; Resick et al., 2013). Symptoms of PTSD fall broadly into four diagnostic categories: intrusive symptoms (e.g., flashbacks, repeated intrusive memories, nightmares), hyperarousal and reactivity symptoms (e.g., hyperarousal, hypervigilance, insomnia, etc.), cognitive and mood symptoms (e.g., guilt, anger, fear, negative beliefs about oneself, others, and the world, etc.), and avoidance symptoms (e.g., internal and external avoidance of reminders), and must last for a period of more than one month (American Psychiatric Association [APA], 2013; Sherin & Nemeroff, 2022; Resick et al., 2013). Moreover, PTSD has been shown to significantly impact

an individual's quality of life and psychosocial functioning (i.e., occupational, interpersonal, intrapersonal activities, etc.; Bovin et al., 2018; Holowka & Marx, 2012).

One study demonstrated that approximately half (45%) of participants who identified as victims and survivors of IPV met diagnostic criteria for PTSD (Mechanic et al., 2008). While other studies have found rates of PTSD in this population reaching as high as 55-92% (Gorde et al., 2004; Humphreys et al., 2001). Concerningly, McWhirter (2006) demonstrated that when PTSD and other trauma disorders are left untreated in this population, individuals are at an increased risk of revictimization. When considering the debilitating implications of PTSD, the rates that victims and survivors of IPV experience this disorder, and the dangers of trauma left untreated, research-supported and accessible treatment is of the utmost importance.

Treatment of Posttraumatic Stress Disorder

Psychological treatment is considered the frontline intervention for PTSD and other trauma disorders (APA, 2020; Bisson et al., 2013; Jonas et al., 2013; Kitchiner et al., 2019; Lewis et al., 2020; Mavranouzouli et al., 2020; Watts et al., 2013). Clinically effective treatments include cognitive-behavioral therapies with a trauma focus (CBT-T), CBT without a trauma focus, group CBT with a trauma focus, guided internet-based CBT, Eye Movement Desensitization and Reprocessing (EMDR) therapy, narrative exposure therapy, and Present-Centered Therapy (PCT); with manualized CBT-T treatment considered the most effective (Bradley et al., 2005; Cusack et al., 2016; Lewis et al., 2020). Manualized CBT-T treatments include Prolonged Exposure (PE), Cognitive-Processing Therapy (CPT), Cognitive Therapy (CT), and Written Exposure Therapy (WET).

Regarding the treatment of PTSD in victims and survivors of IPV, research has demonstrated the effectiveness of a variety of treatment interventions and modalities. Effective

interventions include Cognitive Trauma Therapy (CTT), Cognitive Trauma Therapy for Battered Women (CTT-BW), CBT, individual and massed CPT, narrative exposure therapy, group-compassion based therapy, mindfulness-based stress reduction interventions, general mindfulness training, EMDR therapy, PCT, art psychotherapy, shelter-driven HOPE (Helping to Overcome PTSD through Empowerment) treatment, and other more comprehensive interventions (i.e., a mix of psychotherapy, advocacy, social support building, parenting resources, legal aid, and assistance obtaining housing, education, and employment; Allard et al., 2018; Andersson et al., 2021; Beck et al., 2016; Crespo et al., 2021; Dutton et al., 2013; Echeburúa et al., 2014; Gallegos et al., 2020; Galovski et al., 2022; Hansen et al., 2014; Jaberghaderi et al., 2019; Johnson et al., 2020; Johnson et al., 2011; Jungersen et al., 2019; Kubany et al., 2004; Liszewska & Urbańska, 2019; Naismith et al., 2020; Orang et al., 2018; Özkafacı & Eren, 2020; Schmidt, 2014; Tarquinio et al., 2012). Various modalities have also demonstrated efficacy in the treatment of victims and survivors of IPV. These include in-person, internet-delivered, individual, group, adjunct individual and group therapy, as well as massed interventions (Andersson et al., 2021; Crespo et al., 2021; Echeburúa et al., 2014; Galovski et al., 2022; Naismith et al., 2020).

Several systematic reviews and a meta-analysis of psychological interventions for treatment in this population found that empowerment-based advocacy and manualized CBT-T interventions were associated with the most physical and mental health benefits (Arroyo et al., 2017; Karakurt et al., 2022; Trabold et al., 2020). Notably, a study by Iverson and colleagues (2011) indicated that CBT for PTSD and depressive symptoms in IPV victims and survivors can also reduce the likelihood of future IPV experiences.

Although these interventions are effective in the treatment of PTSD for victims and survivors of IPV, manualized CBT-T interventions tend to focus treatment on one discrete traumatic event. When considering that IPV is a relational pattern that often entails a pattern of repeated traumatic events and many victims and survivors experience significant barriers to leaving violent relationships, CBT-T may not offer treatment that encompasses the entirety of victims' and survivors' experiences. Moreover, a study by Iverson and colleagues (2016) that examined female veterans' preferences for IPV counseling, demonstrated that participants preferred treatment that focused on the enhancement of coping skills and management of mental health symptoms. Therefore, an ongoing treatment approach aimed at teaching skills and empowering individuals to cope with their mental health symptoms may be of interest. One potential treatment option that addresses this need is Dialectical Behavior Therapy (DBT; Wagner & Linehan, 2006).

Dialectical Behavior Therapy

DBT was originally developed to treat individuals with borderline personality disorder (BPD) experiencing chronic suicidality (Linehan, 2000) and has been shown to be highly efficacious in stabilizing and controlling self-destructive behavior and improving compliance with treatment (Panos et al., 2014; Storebø et al., 2020). When considering that most individuals diagnosed with BPD also meet diagnostic criteria for PTSD, the use of DBT in treatment fits well (Wagner & Linehan, 2006). DBT teaches behavioral strategies for regulating emotions, tolerating distress, functioning interpersonally, and engaging in mindfulness; all beneficial techniques for the treatment of PTSD and management of trauma symptoms (Linehan, 2014; Wagner & Linehan, 2006).

Standard implementation of DBT consists of a weekly individual therapy session, a weekly group therapy session focused on skill learning and acquisition, a consultation team meeting for therapists providing DBT intervention, and optional phone coaching for clients (Chapman, 2006). Meta-analytic research has demonstrated DBT's efficacy in reducing self-directed violence (suicidal and nonsuicidal self-injury [NSSI]) and decreasing the frequency of psychiatric crisis service use (DeCou et al., 2019), minimizing depressive symptoms (Chen et al., 2021), reducing anxiety symptoms (Delaquis et al., 2020), decreasing transdiagnostic anger and aggression (Ciesinski et al., 2022), improving emotion regulation skills (Delaquis et al., 2020), reducing bulimia nervosa and binge eating disorder symptoms (Rozakou-Soumalia et al., 2021), lowering substance use disorder symptoms and increasing abstinence from substance use (Giannelli et al., 2019; Haktanır & Callender, 2020), and decreasing symptoms associated with borderline personality disorder (BPD; Cristea et al., 2017) in adult populations. Several meta-analyses have also demonstrated DBT's effectiveness at reducing self-harm, suicidal ideation, and depressive symptoms in adolescents (Cook & Gorraiz, 2016; Kothgassner et al., 2021), improving the marital quality of couples (Keybollahi et al., 2022), and decreasing depressive symptoms in older adults (Lynch et al., 2003).

The research literature to date has established DBT's efficacy in the treatment of a range of diagnoses and symptomatic concerns, but a limited number of studies have examined DBT's efficacy for specific identity groups. Despite limited research in this area, preliminary evidence suggests comparable treatment outcomes among populations. A randomized control trial examining DBT treatment outcomes found no significant differences between non-Hispanic white and racially/ethnically minoritized individuals (Chang et al., 2023). While another study demonstrated that race/ethnicity did not predict dropout rates for patients receiving outpatient

DBT (Landes et al., 2016). In a study examining adolescents, DBT treatment outcomes were also found to be comparable between ethnic minority and white participants (Yeo et al., 2020). While Adrian and colleagues (2019) found that Hispanic youth experienced greater reductions in suicide attempts following DBT treatment in comparison to non-Hispanic youth. Finally, a qualitative study examining the experiences of Native American individuals in the Southwest section of the US identified positive treatment experiences with DBT (Woodruff, 2019).

Similar findings have been demonstrated in the LGBTQIA+ community. The randomized control trial conducted by Chang and colleagues (2023) found comparable DBT treatment outcomes for heterosexual and LGBTQ+ participants. While two other studies examining the effectiveness of DBT in adolescent samples showed that LGBTQ+ and heterosexual participants improved similarly throughout treatment (Camp et al., 2024; Poon et al., 2022). Camp and colleagues (2024) further demonstrated that retention rates did not differ significantly between LGBTQ+ and heterosexual participants in their study. Moreover, Beard and colleagues (2017) found no significant treatment outcome differences between LGBTQ+ and heterosexual adults in a partial hospitalization program combining DBT skills and cognitive-behavioral techniques in a group treatment setting.

A variety of studies have also examined the effectiveness of cultural and/or identity-related adaptations to the existing DBT protocol. Protocol adaptations have been made for LGBTQ+ identifying individuals (Camp et al., 2023; Cohen et al., 2021; Pantalone et al., 2019; Skerven et al., 2019, 2021), transgender and gender-diverse individuals (Camp et al., 2023; Sloan et al., 2023; Tilley et al., 2022), the deaf community (O’Hearn et al., 2010), Chinese individuals living in China and the US (Chang et al., 2022; Cheng & Merrick, 2017; Fan & Leung, 2015; Yang et al., 2020), South Asian women living in the US (Arunagiri, 2021),

American Indian/Alaska Native individuals living in the US (Beckstead et al., 2015; Kinsey, 2014; Kohrt et al., 2017), Pakistani individuals (Butt et al., 2020), women from rural Nepal (Ramaiya et al., 2018), Spanish individuals (Montero Fernández et al., 2013; Padilla Torres et al., 2017), Latine and Mexican individuals living in the US (Gomez et al., 2017; McFarr et al., 2014; Mercado & Hinojosa, 2017), and Black individuals living in the US (Kamody et al., 2020). However, no study to date has examined whether cultural and/or identity-related adaptations are more efficacious than nonadapted DBT in the treatment of different identity groups (Haft et al., 2022).

Although the research literature examining the efficacy of DBT amongst different identity groups is promising, it is yet to be understood whether DBT is effective and appropriate for all populations. Further research is needed to investigate the generalizability of DBT for different sociodemographic groups and those holding marginalized intersectional identities (Harned et al., 2022).

Dialectical Behavior Therapy for Intimate Partner Violence

Due to the intense resource requirement of standard DBT implementation, many researchers and therapists have shortened the intervention to standalone DBT group therapy focused on skills (Valentine et al., 2015). A systematic review completed by Valentine and colleagues (2015) found preliminary evidence for the effectiveness of standalone DBT skills group treatment for symptoms of Axis I disorders (i.e., mood disorders, trauma disorders, substance use disorders, etc.); in contrast, symptoms of Axis II disorders (i.e., personality disorders), such as suicidality or self-harm, were not adequately addressed by the standalone treatment. A randomized control trial aimed at understanding the importance of DBT skills training suggested opposing information to Valentine and colleagues' (2015) findings. Linehan

and colleagues (2015) found that DBT skills training with case management and standard DBT (i.e., skills training and individual therapy) resulted in similar improvements in the frequency and severity of suicidal ideation, suicide attempts, use of crisis services due to suicidality, and reasons for living, suggesting similar effectiveness in the treatment of Axis II disorder symptoms. Due to the limited resource capacity in DV shelters and finite social services for IPV, standalone DBT skills groups may help close the treatment gap.

Iverson and colleagues (2009) examined the effectiveness of a DBT skills group in the treatment of women victims of IPV, and findings indicated a reduction in depressive symptoms, hopelessness, and general psychiatric distress. The previous study did not clarify if this treatment was in the interest of treating PTSD; however, it can be inferred that many of the participants met diagnostic criteria for the disorder due to their exposure to IPV. Another study examined the effectiveness of a 2-day intensive DBT group intervention for victims of IPV, with results indicating significant improvements three and nine months after treatment in hopelessness, general distress, depression, PTSD severity, and self-compassion (Lee & Fruzzetti, 2017). In a third study aimed at building upon Lee and Fruzzetti's (2017) findings, researchers implemented a DBT video intervention adjunct (VIA) over two consecutive days in the interest of treating individuals with less access to treatment due to rural living (Newlands & Benuto, 2021). Findings indicated that the entire sample demonstrated statistically significant improvements in depression, anxiety, PTSD, emotional regulation, interpersonal sensitivity, and mindfulness with medium to large effect sizes at one-month post-intervention.

Research has also demonstrated the utility of this intervention in individuals holding marginalized identities and living in the US as well as for those living in countries outside of the US. One study showed that DBT skills training was effective in the treatment of IPV survivors

identifying as Latina who were Spanish-speaking in the US (Soto-Lopez, 2021). Another study that examined the utility of a 5-week DBT skills group for South Asian women in the US who had experienced IPV found that participants endorsed higher emotion regulation skills following treatment (Arunagiri, 2021). However, challenges related to cultural appropriateness and marginal symptom reduction were observed, which can partially be attributed to the study's limitations (i.e., early discontinuation of the group due to the COVID-19 pandemic). Finally, a study conducted in Bayelsa State, Nigeria, found that a DBT intervention program was effective in the treatment of depressive symptoms, social isolation, and general mental health symptomatology in a sample of IPV victims (Teibowei, 2018).

In addition to the symptom reduction that DBT provides, this therapeutic intervention also offers more treatment accessibility for victims and survivors of IPV. Given the shrinking budgets that US-based IPV resources are experiencing (Rorie et al., 2014), the client-to-mental health provider gap (Kazdin & Blaise, 2011), and the poverty and lack of access to services that many victims and survivors of IPV face (Belle & Doucet, 2003; Rosen et al., 2004), treatment accessibility is a particular concern. DBT skills training offers a potential solution, as this treatment can be modified and delivered in a group format, which allows for the treatment of multiple individuals in the same time allotment as individual therapy (Blackford & Love, 2011; Linehan & Wilks, 2015; Rose, 2013). Group therapy is also beneficial in developing social skills, a sense of community belonging, and validation of one's experience through common humanity (Oxford Treatment Center, 2023).

Additionally, DBT intervention does not require a high level of participant functioning, treats a wide range of psychopathology, and increases perceived self-competence with skill acquisition (Linehan, 2014). When considering the lower functioning capacity of those

diagnosed with PTSD (Bovin et al., 2018; Holowka & Marx, 2012), the broad range of psychopathology experienced and low self-competence scores in victims and survivors of IPV (García-Moreno et al., 2005; Gerlock, 1999; Güler et al., 2022; Hawcroft et al., 2019; Howard et al., 2010; McCaw et al., 2007; Scott, 2015; Warshaw et al., 2013; WHO, 2013), the utility of a DBT skills group appears promising. On a systemic level, this intervention allows for broader treatment implementation, lower consumption of therapeutic resources, and accessible costs for DV shelters and individuals seeking out treatment. Thus, this treatment could be an accessible and effective solution for the treatment of PTSD in victims and survivors of IPV, both individually and systemically.

Current Study

The current study explored the relationship between a rolling-admission DBT skills group at a DV shelter and victims' and survivors' trauma symptoms, positive and negative affect, emotion regulation skills, self-efficacy, and perceived social connection. These domains were selected for measurement as research examining the impact of IPV suggests negative implications in each of these areas (Bovin et al., 2018; Holowka & Marx, 2012; WHO, 2013) and similar studies have effectively used measures that capture these domains (Arunagiri, 2021; Iverson et al., 2009; Teibowei, 2018). The impact of participant attendance on the pre- and post-intervention measures was also examined. Specifically, participants attending one group and participants attending more than one group were compared to determine whether more groups attended resulted in additional positive change on the given measures. If the DBT skills group is effective in one or more areas, findings could inform future psychological treatment approaches for this population. This study also sought to qualitatively examine the motivation of participants attending the group intervention, the cultural appropriateness of the skills taught, the

utilization and effectiveness of the skills taught, and recommendations for improvement; to obtain a richer and more in-depth understanding of participants' experiences in the study's intervention.

It is important to note that a rolling-admission group therapy format was undertaken to examine the effectiveness of this style of intervention. Similar studies have examined a closed group therapy format (Arunagiri, 2021; Iverson et al., 2009; Teibowei, 2018); however, this may not meet victims' and survivors' needs adequately. A rolling-admission therapy group can address the barriers commonly faced by victims and survivors of IPV seeking mental health treatment (e.g., financial instability, housing and location changes, and general life transitions; NCADV: National Coalition Against Domestic Violence, n.d.). While a closed group therapy format may exclude victims and survivors of IPV who can only attend for part of the treatment cycle or for those who may miss intervention sessions as a result of the transitions and challenges associated with IPV. Thus, a rolling-admission group therapy format was used to examine whether this format better met the unique needs of this population without compromising the benefits that a closed group therapy format offers to participants.

The hypotheses of the current study were: participation in the rolling-admission DBT skills group will result in improvement on all outcome measures (PCL-5, PANAS-SF, DERS-SF, GSES, and SCS). Participants who attend more groups will see more improvement on the outcome measures than participants attending fewer groups.

Methods

Participants

The sample was made up of 23 victims and survivors of IPV who reside in the northern Colorado area. This sample size was deemed appropriate as similar studies have examined the effectiveness of a DBT skills group intervention with comparable sample sizes (Arunagiri, 2021; Iverson et al., 2009; Soto-Lopez, 2021). Participants were compensated for completing each pre- and post-intervention measure at a rate of \$20/hour. Participants who did not complete all pre- and post-intervention measures were still compensated for the completed measures. The inclusion criteria for participation in this study included self-reported past or current experience(s) of IPV, being at least 18 years of age, verbal and written proficiency in the English language, and self-reported current PTSD symptoms. The criterion of self-reported current PTSD symptoms was determined via participants' responses to one question on the screening questionnaire (see Appendix A). Participants were asked, "are you currently experiencing posttraumatic stress disorder symptoms (PTSD; e.g., nightmares; feeling jumpy or easily startled; avoiding people, places or activities; overwhelming memories of a distressing event, etc.)?" If the question was endorsed, this inclusion criterion was considered met. Exclusion criteria included observable psychosis, mania, substance use, aggression, or cognitive impairment, which may hinder participation in the group intervention.

The inclusion criteria were broad, and the exclusion criteria were kept minimal to use a community-based participatory research (CBPR) informed approach within this study (Collins et al., 2019). CBPR is a collaborative research approach aimed at bringing community members, researchers, and stakeholders together to close the research-practice gap. This objective promotes

patient-centered research and practice, increases the internal and external validity of the research methods, and strengthens the ethical research framework by enhancing social justice and culturally appropriate methods. Within the current study, full adherence to CBPR was not taken due to the intensive resource and time requirements; however, a CBPR-informed approach was used to harness some of the benefits of this objective.

Procedure

After attaining approval for the study from Colorado State University's Institutional Review Board, 23 participants were recruited from a partnering DV shelter in the community for participation in the current study. Recruitment methods included posted flyers at the DV shelter and word-of-mouth recruitment from staff to residents and individuals seeking outpatient support from the shelter. Compensation for completion of the pre- and post-intervention measures was advertised during the recruitment process for transparency. The partnering shelter offers emergency short-term housing, outpatient support, legal advocacy, medical support, and the provision of everyday resources (i.e., food, clothing, etc.) to individuals and families within the community who have experienced DV. The shelter was originally established in 1980 to provide services for those impacted by DV and end this form of violence in northern Colorado. Individuals seeking services from this shelter come from all over the US and hold a variety of different identities (e.g., racial and ethnic identities, sexual orientations, gender identities, ages, ability levels, religions, etc.). Previous mental health-related support services offered at this location include a weekly support group aimed at providing psychoeducation regarding DV, promoting self-care activities, and building and maintaining social connections with other residents.

The following section will describe the procedures of the first group intervention attended, which will be referred to as, “the first session” for distinction. Individuals attending their first session through the partnering shelter were initially led through the verbal consent process for treatment engagement. This process included a verbal introduction to the intervention’s purpose, participants’ rights to and the limits of confidentiality, the interventionist’s training status and experience, and the contact information of the interventionist’s licensed supervisor. Potential participants were given the option to discuss any questions or concerns with the interventionist prior to verbally consenting to treatment. The verbal consent process described above was undertaken at the beginning of the first session so that individuals who did not want to participate in the research study could still participate in the group therapy intervention.

Following the verbal consent process, the interventionist introduced the research study affiliated with the intervention and the study aims. Interested participants were provided with a QR code that directed them to the screening questions to determine if potential participants met the inclusion criteria for the current study. If potential participants met these criteria, the survey directed them to the informed consent document (see Appendix B) which detailed the study purpose, the focus of the group intervention, their right to confidentiality, their general rights as participants, the risks and benefits associated with study participation, information about the pre- and post-intervention measures and the platform which they will be completed on (i.e., Qualtrics), and information regarding compensation for their time. Once again, interested participants were given the option to discuss any questions or concerns with the interventionist prior to signing this document. Once the informed consent document for the study was completed, the browser redirected participants to the demographic questions, general information

questions, and pre-intervention surveys (see Appendices C-I). The interventionist then gave time for first-time participants to complete the pre-intervention measures on their phones or laptops. Due to the rolling-admission and CBPR-informed approach taken in the study, participants did not meet with the interventionist individually prior to attending their first session. Thus, participants completed the pre-intervention measures in the group therapy setting prior to the first session content.

Following participants' completion of the pre-intervention measures, the group intervention was employed. At the end of the intervention, participants were asked to complete the first round of post-intervention measures within 24 hours of the conclusion of the first session. Post-intervention data were also collected within 24 hours of every subsequent group intervention attended by participants. Additionally, all participants were asked to complete the post-intervention measures one month after their last group attended. For participants attending multiple group interventions, pre-intervention measures were only employed prior to the first session and not prior to any subsequent group interventions attended. Participants attending any group after the first session, were asked to arrive 30 minutes later (6:30 pm) than the start time of the group intervention (6:00 pm).

For clarity, participants who attended only one intervention were administered three assessments to assess for change following the intervention (i.e., pre-intervention, 24-hour post-intervention, and one-month post-intervention measures). For each additional group attended one additional assessment (24-hour post-intervention measure) was administered. As an example, if a participant attended 10 groups, they would be administered 12 total assessments (i.e., one set of pre-intervention measures, 10 sets of 24-hour post-intervention measures, and one set of one-month post-intervention measures).

Participant compensation was funded by payment from the partnering shelter for the interventionist's work as a DBT skills group leader. The interventionist had been leading one DBT skills group weekly for most weeks since September 2022 in preparation for the current study. The partnering shelter paid the interventionist \$50 per group led, totaling approximately \$3,100 in March 2024. The interventionist disbursed the money earned directly to participants for fair compensation following their completion of the pre- and post-intervention measures.

Intervention

The group therapy intervention was conducted at the partnering DV shelter one evening per week for 20 weeks between August 2023 and March 2024. The group intervention lasted approximately 90-120 minutes on each occasion, and the shelter provided childcare so that parents could attend. This study used a rolling-admission group therapy format instead of a closed group therapy format used by similar studies (Arunagiri, 2021; Iverson et al., 2009; Teibowei, 2018), to address the barriers commonly faced by victims and survivors of IPV seeking mental health treatment (e.g., financial instability, housing and location changes, and general life transitions; NCADV: National Coalition Against Domestic Violence, n.d.).

Details regarding the structure of each group are included in Table 1. In accordance with the DBT for IPV protocol developed by Iverson and colleagues (2009) and further utilized by Lee and Fruzzetti (2017) and Newlands and Benuto (2021), the current study employed a modified DBT skills group. A schedule for the DBT skill taught each week can be viewed in Table 2. Additionally, in preparation for the current study, the interventionist underwent a weeklong training titled, "Dialectical Behavior Therapy Skills Training: Fundamentals," in October 2022. This training was provided through Behavioral Tech, a company that provides

DBT training, resources, and research to trained professionals worldwide (Behavioral Tech, n.d.).

Table 1: Individual Group Intervention Structure by Minute

Time in Minutes	Task or Activity
0-3	Introduce the purpose of the group intervention and the research study. Discuss the group intervention and Informed Consent document with interested participants.
6-10	Provide the QR code for the informed consent document and pre-intervention survey, answer any questions regarding the study and Informed Consent document, and allow participants time to read and sign forms.
11-35	Allow participants to complete the research measures in Qualtrics.
36-86	Teach the DBT skill, encourage discussion and questions regarding the skill, and plan for skill implementation.
87-90	Discuss participant reactions to the group, discuss post-treatment measures and timeline, and thank participants for attending.

Table 2: Group Intervention by Week

Week	DBT Skill
1 - 9/5/23	Mindfulness: Wise mind
2 - 9/12/23	Mindfulness: “What” skills: Observe, describe, and participate
3 - 9/19/23	Mindfulness: “How” skills: Nonjudgmentalness, One-mindfulness, effectiveness, Options for attention, and Letting go of judgments
4 - 9/26/23	Distress Tolerance: TIP Skills
5 - 10/3/23	Distress Tolerance: Self-soothing, Improving the Moment, and Sensory Awareness
6 - 10/10/23	Interpersonal Effectiveness: Recovering from Invalidation and when not to validate
7 - 11/7/23	Interpersonal Effectiveness: Self-Validation
8 - 11/14/23	Emotion Regulation: Understanding and Naming Emotions and What Emotions Do for You
9 - 11/28/23	Emotion Regulation: What Emotions Do for You Cont. and Ways to Describe Emotions
10 - 12/5/23	Emotion Regulation: Changing Emotional Responses and Check the Facts
11 - 12/12/23	Emotion Regulation: Opposite Action and Problem Solving

12 - 12/19/23	Emotion Regulation: Reducing Vulnerability to Emotion Mind and Accumulating Positive Emotions
13 - 1/9/24	Emotion Regulation: Cope Ahead
14 - 1/15/24	Emotion Regulation: PLEASE
15 - 1/22/24	Interpersonal effectiveness: Goals of interpersonal effectiveness; DEARMAN; Factors that interfere
16 - 1/29/24	Interpersonal Effectiveness: GIVE (more validating); FAST (self-respect)
17 - 2/5/24	Emotion Regulation: Understanding and Naming Emotions and What Emotions Do for You, and Ways to Describe Emotions
18 - 2/19/24	Emotion Regulation: Changing Emotional Responses and Opposite Action
19 - 3/4/24	Interpersonal Effectiveness: Recovering from Invalidation; When not to validate; Self-Validation
20 - 3/18/24	Distress Tolerance: Mindfulness of Current Thoughts

Preliminary Work with the Agency

The interventionist began working with the partnering shelter in May 2021 as a grant-funded individual psychotherapist. The grant was awarded by the Substance Abuse and Mental Health Services Administration (SAMHSA) in response to the COVID-19 pandemic, with an aim of treating individuals impacted by DV and those experiencing suicidality with the state of Colorado. As the grant's funding came to an end in May 2022, the interventionist and the partnering shelter collaboratively decided to offer group psychotherapy services in the interest of providing continued mental healthcare to those impacted by DV in Northern Colorado. Group psychotherapy required fewer resources from the partnering shelter and the interventionist, and offered increased accessibility to those seeking mental health services through the shelter. Given the high rates of traumatic stress experienced by individuals seeking services from the partnering shelter, the interventionist and partnering shelter agreed to run a CPT group in August 2022. After completing approximately six CPT group interventions, the interventionist determined that a CPT group was not feasible due to inconsistent attendance and high rates of group member dropout resulting from increased life transitions associated with DV. The interventionist and partnering shelter then collaboratively decided to employ a rolling-admission DBT skills group intervention to better meet the needs of group participants.

As stated above, the interventionist underwent a weeklong training titled, "Dialectical Behavior Therapy Skills Training: Fundamentals," in October 2022. In addition to the training, the interventionist facilitated a weekly DBT skills group at the partnering shelter from September 2022 to July 2023 in preparation for the current study. From September 2022 to December 2022 the interventionist also observed the weekly support group aimed at providing psychoeducation on DV led by the partnering shelter's staff to ensure complimentary but distinct group therapy

programs. The 20-week intervention associated with the present study was then employed and data were collected to better understand whether this intervention met the needs of individuals seeking services from the partnering shelter. Following completion of the intervention, the interventionist trained another advanced doctoral student in the same Counseling Psychology program to facilitate the DBT skills group for victims and survivors of IPV. This training was completed in the interest of continued access to evidence-based mental healthcare for the Northern Colorado community impacted by IPV. Finally, the results of the present study were disseminated to the partnering shelter.

Although the current study did not fully adhere to a CBPR framework, several pillars of CBPR were harnessed throughout the lifecycle of this study. These pillars included the interventionist's engagement with reflexivity, building and maintaining relationships with the community, engaging the community in part of the research process, and disseminating the research together with the community (Collins et al., 2019).

Measures

Demographics and General Information

After completing the informed consent document, participants answered a series of demographic-related questions which gathered their age, race/ethnicity, gender identity, sexual orientation, religion, ability status, legal history, housing status, employment status, relationship status, number of children, among other questions. General questions were also asked in this section, including previous psychological treatment, current psychotropic medication regimen, goals for current psychological treatment, motivation for attending this group intervention, and information regarding their relationship involving IPV (e.g., time spent in this relationship, current engagement in this relationship, time since leaving this relationship, etc.). The questions

within this section were only asked in the pre-intervention measures. See Appendix C for a complete list of questions asked.

PTSD Symptoms

The PTSD Checklist for DSM-5 (PCL-5) over the past week was used to assess for PTSD symptomatology. The PCL-5 is a 20-item self-report measure, and each item is scored on a 5-point Likert scale ranging from 0 (not at all) to 4 (extremely; Blevins et al., 2015). This measure asks participants whether they have experienced each of the twenty symptoms of PTSD in the DSM-5 (i.e., In the past week, how much were you bothered by repeated, disturbing, and unwanted memories of the stressful experience?). Total scores range from 0 to 80, with scores above 31-33 considered PTSD-positive for the general population (Veterans Affairs [VA], 2018). In the interest of determining a cutoff score, the current study deemed scores at or above 32 as PTSD positive. Previous research shows that the PCL-5 exhibits strong internal consistency ($\alpha = .94$), convergent ($r_s = .74$ to $.85$) and discriminant ($r_s = .31$ to $.60$) validity, and is sensitive to change (Blevins et al., 2015). Reliable change, or change not due to chance, on the PCL-5 is represented by a 5-10 point change, while clinically significant change is represented by a 10-20 point change (Weathers et al., 2013). The questions in this measure were asked in the pre-intervention and all post-intervention measures (i.e., within 24 hours after the group intervention and one month after the final group attended).

Positive and Negative Affect

Positive and negative affect over the past week was assessed by the Positive and Negative Affect Schedule – Short Form (PANAS-SF). The PANAS-SF is a 20-item self-report measure, and each item is scored on a 5-point Likert scale ranging from 1 (very slightly or not at all) to 5 (extremely; DePaoli & Sweeney, 2000). This measure assesses the two emotional dimensions of

affect, positive and negative, with 10 items for each dimension. Scores range from 10 to 50 for positive affect, with higher scores indicating higher levels of positive affect, and 10 to 50 for negative affect, with lower scores indicating lower levels of negative affect (Watson et al., 1988). PANAS-SF has demonstrated adequate internal consistency for both the positive ($\alpha = .89$) and negative ($\alpha = .85$) affect scales in previous research (Crawford & Henry, 2004). The questions within this measure were asked in the pre-intervention and all post-intervention measures.

Emotion Regulation Difficulties

The Difficulties in Emotion Regulation Scale – Short Form (DERS-SF) was used to assess emotion regulation skills. The DERS-SF is an 18-item self-report measure, and each item is scored on a 5-point Likert scale ranging from 1 (almost never [0-10%]) to 5 (almost always [91-100%]; Kaufman et al., 2016). This measure assesses for common emotion regulation challenges (i.e., I have difficulty making sense out of my feelings) captured by six subscales (nonacceptance of emotional responses, difficulty engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity). Scores on the total scale range from 18 to 90, while scores on each of the six subscales range from 3 to 15. On both the total scale and subscale scores, higher scores indicate worse emotion regulation skills (Kaufman et al., 2016). The DERS-SF is a shortened version of the original 36-item measure. Previous research has demonstrated that this abbreviated measure has strong internal consistency for all six subscales ($\alpha = .78$ to $.91$) and strong reliability and validity (Kaufman et al., 2016; Victor & Klonsky, 2016). The questions within this measure were asked in the pre-intervention and all post-intervention measures.

Self-Efficacy

The General Self-Efficacy Scale (GSES) was used to assess perceived self-efficacy or an individual's belief in their capacity to succeed or accomplish a task. The GSES is a 10-item self-report measure, and each item is scored on a 4-point Likert scale ranging from 1 (not at all true) to 4 (exactly true; Schwarzer & Jerusalem, 1995). This measure asks participants about their perceived ability to cope with daily stressors and adapt to challenging circumstances (i.e., I am confident that I could deal efficiently with unexpected events). Total scores range from 10 to 40, with higher scores indicating greater perceived self-efficacy. The GSES has demonstrated moderate to strong internal consistency ($\alpha = .88$ and $.91$) and stable test-retest validity (Chen et al., 2001) in previous research. The questions within this measure were asked in the pre-intervention and all post-intervention measures.

Social Connectedness

The Social Connectedness Scale (SCS) was used to assess for perceived connection to others. This scale is an 8-item self-report measure, and each item is scored on a 6-point Likert scale ranging from 1 (strongly agree) to 6 (strongly disagree; Lee & Robbins, 1995). This measure asks participants about their perceived social belongingness (i.e., Even around people I know, I don't feel that I really belong). Total scores range from 8 to 48, with higher scores indicating better perceived social connectedness (Lee & Robbins, 1995). Previous research has shown that the SCS has strong internal consistency ($\alpha = .91$) and stable test-retest validity (Lee & Robbins, 1995). The questions within this measure were asked in the pre-intervention and all post-intervention measures.

Additional Tracking Methods

Attendance information (i.e., how many groups were attended) was tracked by the interventionist. In the 24-hour post-intervention measures, participants' motivation for attending the group intervention, the perceived cultural appropriateness of the group intervention, and recommendations for improving the group intervention were assessed through qualitative questions. While in the one-month post-intervention measures, type of skill(s) used after the group intervention, effectiveness or ineffectiveness of the skill(s) taught, and strengths and recommendations for the group intervention were assessed qualitatively.

Data Analysis

To test the hypothesized relationship between a rolling-admission DBT skills group at a DV shelter and victims' and survivors' trauma symptoms, positive and negative affect, emotion regulation skills, self-efficacy, and perceived social connection, several quantitative and qualitative data analysis methods were employed. Preliminarily, descriptive statistics (i.e., mean and standard deviation) were used to examine the data at all timepoints (i.e., pre-intervention, 24-hour post-intervention, and one-month post-intervention). A more thorough descriptive analysis was reported for the pre-intervention baseline data to better understand the score characteristics of individuals seeking out the group intervention. Confidence intervals were not calculated due to the small sample size, as precision point estimates were too small for appropriate use in this analysis (Cummings, 2012).

Unbiased Cohen's *d* was then calculated to determine the effect sizes between pre-intervention data and 24-hour post-intervention data, as well as pre-intervention data and one-month post-intervention data. Effect sizes were calculated for one intervention as well as two to three interventions to examine the dose-effect of the group intervention. Effect sizes were

interpreted as follows: small ($d \geq 0.2$), medium ($d \geq 0.5$), and large ($d \geq 0.8$; Sullivan & Feinn, 2013). Unbiased Cohen's d allowed for a within-subjects effect size analysis following the group intervention in a repeated measures design (Cumming, 2012). This method is not influenced by sample size (Cumming, 2013), allowing for proper analysis within the current study given the small sample size. The equations are as follows:

$$d_{unbiased} = \left(1 - \frac{3}{4df - 1}\right) \times d$$

$$d = \frac{M_{post} - M_{pre}}{SD_{pooled}}$$

$$SD_{pooled} = \sqrt{\frac{SD_{pre}^2 + SD_{post}^2}{2}}$$

An idiographic analysis was undertaken for two individuals who attended eight and 11 group interventions respectively. This method was employed to better understand the pattern of change in scores over time for participants who elected to attend more group interventions than other participants. Graphical representations of both participants' scores in relation to interventions attended were created and are discussed below. Graphical representations of idiographic data offer a clear method to visualize and comprehend data, and have been deemed sufficient in the analysis of discrete individuals (Rosenblatt & Greenberg, 2008).

Finally, a qualitative content analysis was undertaken to assess the usefulness and utilization of DBT skills taught, participant reasons for attending the group intervention, and cultural appropriateness of the intervention employed. Content analysis was selected as the qualitative analysis technique as this method aims to systematically classify the data to identify themes or patterns (Mayring, 2015). This approach does not provide theoretical explanations, but rather describes the content of the data for deeper understanding. Throughout analysis, deductive

(i.e., specific predetermined questions were asked) and inductive (i.e., allowing themes to emerge from participant responses) approaches were taken to analyze and interpret the data most effectively.

Regarding item-level missing data, total missingness was negligible. In the five measures assigned (i.e., DERS-SF, GSES, PANAS-SF, PCL-5, and SCS) nine data points were missing in the pre-intervention data resulting in an item missingness of < 1%, eight data points were missing in the 24-hour post-intervention data resulting in an item missingness of < 1%, and one data point was missing in the one-month post-intervention data resulting in an item missingness of < 1%. To address item missingness, mean substitution was used for subscales with at least 75% complete data per Parent's (2013) recommendations. Mean substitution is the process of calculating the mean of the items answered in the subscale of interest and then inputting that value as a replacement for the missing item(s). Subscales with less than 75% complete data were omitted from analysis. Scale-level missing data totaled two missing scales from one participant in the pre-intervention data and eight missing scales from two participants in the 24-hour post-intervention data. As described in Table 3 in the Results section below, individual-level missing data were a significant limitation in the present study. As a result, pairwise deletion was employed in the effect size analysis to reduce bias. More specifically, only participants who completed both the pre- and post-intervention measures at the timepoint being analyzed were used to calculate the effect size of interest.

Statement of Positionality

For clarity, the interventionist also acted as the primary researcher in the present study. She identified as a white, queer, cisgender, middle-class American woman in her mid-20s. The interventionist was an advanced doctoral student in a Counseling Psychology program with

training in treating PTSD in an individual therapy setting and employing DBT in a group therapy setting. Additionally, the primary researcher had not directly experienced IPV in her lifetime.

Results

The first section presents the descriptive analysis of the current study, which encompasses Tables 3-5. Table 3 describes the demographic information and descriptive characteristics of all participants. Table 4 describes the attendance of all participants and the measure completion/missingness rates. While Table 5 gives a descriptive analysis (i.e., mean, standard deviation, etc.) of the pre-intervention data, in the interest of describing the score characteristics of individuals who sought out the group intervention.

The second section presents the effect size analysis of participants who attended a single intervention or two to three group interventions; described by Tables 6-9. Tables 6 and 7 provide the descriptive statistics and effect sizes (i.e., unbiased Cohen's d) for participants who attended a single intervention or two to three group interventions and completed the 24-hour post-intervention measures. While Tables 8 and 9 provide the descriptive statistics and effect sizes for participants who attended a single intervention or two to three group interventions and completed the one-month post-intervention measures.

The third section presents the idiographic analysis of two participants who attended eight and 11 group interventions respectively. Their data is presented in Figures 1-9. Figures 1-3 demonstrate Participant 1's scores on all measures assigned by group intervention attended. Figures 4-9 demonstrate Participant 11's scores on all measures assigned by group intervention attended. The final section illustrates the findings from the qualitative content analysis from data collected at the 24-hour post-intervention and one-month post-intervention timepoints.

Descriptive Statistics

Table 3: Demographic Information and Descriptive Characteristics

Descriptive	N	Mean (SD)
Age (years)	-	45.7 (12.8)
25-34	5	-
35-44	2	-
45-54	6	-
55-64	3	-
65-74	1	-
No response	6	-
Sex		
Female	22	-
Male	1	-
Gender		
Cisgender woman	17	-
Cisgender man	1	-
Gender nonbinary transgender woman	1	-
No response	4	-
Race		
White	18	-
Asian	1	-
American Indian or Alaska Native	1	-
Black or African American	1	-
White & American Indian or Alaska Native	1	-
Unsure	1	-
Ethnicity		
Hispanic	4	-
Latine	1	-
Not Hispanic or Latine	14	-
No response	4	-
Born in the US		
Yes	20	-
No – Peru	1	-
No response	2	-
Sexual orientation		
Heterosexual	19	-
Bisexual	3	-
Pansexual	1	-
Disability		
Yes	12	-
No	11	-
Religion		
Spiritual	5	-

Catholic	4	-
Protestantism and/or Christianity	5	-
Buddhism	1	-
Judaism	1	-
Protestantism and/or Christianity & Spiritual	3	-
None	4	-
<hr/>		
Education (years)	-	15.3 (2.2)
Some high school	1	-
High school diploma	1	-
Business or technical training beyond HS	3	-
Some college	6	-
College degree	7	-
Some graduate or professional school beyond college	1	-
Master's degree	3	-
Doctoral degree	1	-
<hr/>		
Personal Income	-	\$23,295 (\$23,859)
Less than \$5,000	7	-
\$5,000-9,999	4	-
\$10,000-14,999	1	-
\$20,000-24,999	2	-
\$25,000-29,999	1	-
\$30,000-49,999	3	-
\$50,000 or more	4	-
Unsure	1	-
<hr/>		
Employment		
Unemployed and not looking for work	4	-
Unemployed and looking for work	9	-
Employed full-time	4	-
Employed part-time	4	-
Retired	2	-
<hr/>		
Housing		
Unhoused or homeless	2	-
Residing at the safehouse	8	-
Staying at a temporary residence	2	-
Housed and renting a space	6	-
Housed and I own a space	5	-
<hr/>		
Current engagement in individual therapy		
Yes	12	-
No; currently seeking out services	10	-
No; not seeking services	1	-
<hr/>		
Previous engagement in individual therapy		
Yes	17	-
No; never sought services	6	-
<hr/>		
Current psychotropic medication regimen		
Yes	11	-

No; currently seeking out services	1	-
No; not seeking services	11	-
<hr/>		
Previous psychotropic medication regimen		
Yes	12	-
No; sought services but never took or received the medication	1	-
No; never sought services	10	-
<hr/>		
Marital status		
Single, never married	5	-
Separated	7	-
Divorced	4	-
Married	7	-
<hr/>		
Parent status		
Yes	16	-
No	7	-
<hr/>		
Number of partners who perpetrated IPV		
1	13	-
2	5	-
3	2	-
4	1	-
6+	2	-
<hr/>		
Length of IPV experience (years)		
1-10	7	-
11-20	7	-
21-30	5	-
31-40	2	-
41-50	2	-
<hr/>		
Currently in a relationship with IPV		
Yes	6	-
No	16	-
Undecided	1	-
<hr/>		
Time since leaving relationship with IPV (days)		
< 1 month	3	-
1 month – 1 year	8	-
5 years	1	-
No response	11	-
<hr/>		

Regarding attendance, 13 participants (56.6%) attended a single intervention, four participants (17.4%) attended two interventions, three participants (13%) attended three interventions, two participants (8.7%) attended eight interventions, and one participant (4.3%) attended 11 interventions. Twenty-three participants (100%) completed the pre-intervention

measures assigned, 17 participants (60%) completed 35 of the 58 24-hour post-intervention measures assigned, and 10 participants (50%) completed 13 of the 26 one-month post-intervention measures assigned. Conversely, 23 of the 58 (40%) 24-hour post-intervention measures assigned and 13 of the 26 (50%) one-month post-intervention measures assigned were not completed, resulting in a total missingness rate of 34% for all data in the present study. See Table 4 below for a more detailed breakdown of the number of groups attended and the measures completed or missing by participant.

Table 4: Attendance and Missing Data

Participant Code	Groups Attended	Pre-Intervention Completed	24-hour Post-Intervention Completed	One-Month Post-Intervention Completed	24-hour Post-Intervention Missing	One-Month Post-Intervention Missing
1	11	1	11	1	0	0
2	2	1	2	0	0	1
3	3	1	2	0	1	1
4	8	1	0	0	8	1
5	1	1	0	0	1	1
6	1	1	1	0	0	1
7	2	1	2	1	0	0
8	1	1	0	0	1	1
9	1	1	1	1	0	0
10	1	1	0	0	1	1
11	8	1	3	3	5	0
12	1	1	1	1	0	0
13	3	1	1	2	2	0
14	1	1	1	0	0	1
15	1	1	1	0	0	1
16	1	1	1	1	0	0
17	2	1	2	1	0	0
18	1	1	0	0	1	1
19	1	1	1	0	0	1
20	2	1	0	0	2	1
21	1	1	1	0	0	1
22	3	1	3	1	0	0
23	1	1	1	1	0	0
Totals	--	23	35	13	23	13
Percentages	--	100%	60%	50%	40%	50%

The DERS-SF Total was completed by 23 participants with a mean score of 54.07 and a standard deviation of 14.46. The maximum score reported was 80 and the minimum was 28. The DERS-SF Strategies subscale was completed by 23 participants with a mean score of 9.09 and a

standard deviation of 3.54. The maximum score reported was 15 and the minimum was 4. The DERS-SF Non-acceptance subscale was completed by 23 participants with a mean score of 9.13 and a standard deviation of 3.84. The maximum score reported was 15 and the minimum was 3. The DERS-SF Impulse subscale was completed by 22 participants with a mean score of 7.05 and a standard deviation of 3.91. The maximum score reported was 15 and the minimum was 3. The DERS-SF Goals subscale was completed by 22 participants with a mean score of 11.96 and a standard deviation of 3. The maximum score reported was 15 and the minimum was 6. The DERS-SF Awareness subscale was completed by 23 participants with a mean score of 8.04 and a standard deviation of 3.42. The maximum score reported was 15 and the minimum was 3. The DERS-SF Clarity subscale was completed by 23 participants with a mean score of 8.48 and a standard deviation of 2.64. The maximum score reported was 14 and the minimum was 4.

The GSES was completed by 23 participants with a mean score of 27.93 and a standard deviation of 6.44. The maximum score reported was 36 and the minimum was 11. The PANAS-SF-P was completed by 23 participants with a mean score of 30.17 and a standard deviation of 9.57. The maximum score reported was 46 and the minimum was 13. The PANAS-SF-N was completed by 23 participants with a mean score of 33.02 and a standard deviation of 8.13. The maximum score reported was 47 and the minimum was 16. The PCL-5 was completed by 23 participants with a mean score of 48.6 and a standard deviation of 14.35. The maximum score reported was 77.9 and the minimum was 24. At pre-intervention, 20 participants (87%) met diagnostic criteria for a diagnosis of PTSD and 3 participants (13%) did not. The SCS was completed by 23 participants with a mean score of 25.96 and a standard deviation of 11.44. The maximum score reported was 46 and the minimum was 8. For additional pre-intervention descriptive statistics (i.e., median, mode) for each measure see Table 5 below.

Table 5: Pre-Intervention Analysis

Measure	Mean (SD)	Max	Min	Median	Mode
DERS-SF Total (N=23)	54.07 (14.46)	80	28	53	38
Strategies (N=23)	9.09 (3.54)	15	4	9	6
Non-acceptance (N=23)	9.13 (3.84)	15	3	8	14
Impulse (N=22)	7.05 (3.91)	15	3	5.5	4
Goals (N=22)	11.96 (3.00)	15	6	12	15
Awareness (N=23)	8.04 (3.42)	15	3	8	10
Clarity (N=23)	8.48 (2.64)	14	4	8	8
GSES (N=23)	27.93 (6.44)	36	11	30	31
PANAS-SF-P (N=23)	30.17 (9.57)	46	13	29	29
PANAS-SF-N (N=23)	33.02 (8.13)	47	16	32	29
PCL-5 (N=23)	48.6 (14.35)	77.9	24	46	42
SCS (N=23)	25.96 (11.44)	46	8	25	40

Note. DERS-SF = Difficulties in Emotion Regulation Scale – Short Form; GSES = General Self-Efficacy Scale; PANAS-SF-P = The Positive and Negative Affect Schedule – Short Form – Positive Affect; PANAS-SF-N = The Positive and Negative Affect Schedule – Short Form – Negative Affect; PCL-5 = The PTSD Checklist for DSM-5; SCS = Social Connectedness Scale. Higher DERS-SF Total and subscale (strategies, non-acceptance, impulse, goals, awareness, clarity) scores indicate more difficulties with emotion regulation. A PCL-5 score of above 32 indicates a positive PTSD diagnosis.

Effect Size Analysis

Pre-Intervention to 24-hour Post-Intervention – One Intervention

The following is a descriptive and effect size analysis of participants who attended a single intervention and completed both the pre-intervention and 24-hour post-intervention measures. Sixteen participants completed the DERS-SF Total, DERS-SF Strategies subscale, DERS-SF Non-acceptance subscale, DERS-SF Awareness subscale, DERS-SF Clarity subscale, GSES, PANAS-SF-P, PANAS-SF-N, PCL-5, and SCS measures. While 15 participants completed the DERS-SF Impulse and DERS-SF Goals subscales. The pre-intervention and 24-hour post-intervention mean and standard deviation scores can be found in Table 6.

The effect size analysis of data collected at the 24-hour post-intervention timepoint suggested that attending a single intervention was associated with improvement, though small, on one facet of emotion regulation. A small inverse effect on the DERS-SF Goals subscale ($d = -0.24$) was observed, indicating somewhat less difficulty engaging in goal directed behavior after

attending a single intervention. However, attending a single intervention worsened another facet of emotion regulation and decreased participants' perceived self-efficacy. More specifically, small effects on the DERS-SF Strategies subscale ($d = 0.24$) and the GSES ($d = -0.2$) were observed, indicating somewhat increased challenges accessing emotion regulation strategies and somewhat lower self-efficacy following a single intervention.

Nine of the 12 measures assigned demonstrated trivial effect sizes. These measures included the DERS-SF Total ($d = -0.04$), DERS-SF Non-acceptance subscale ($d = -0.09$), DERS-SF Impulse subscale ($d = 0.0$), DERS-SF Awareness subscale ($d = -0.12$), DERS-SF Clarity subscale ($d = -0.08$), PANAS-SF-P ($d = -0.08$), PANAS-SF-N ($d = 0.08$), PCL-5 ($d = -0.11$), and SCS ($d = -0.11$). Additionally, no participant experienced a change in their PTSD diagnosis from pre-intervention to 24-hour post-intervention following attendance of a single intervention as evidenced by each participants' PCL-5 score. At pre-intervention and 24-hour post-intervention, 15 participants met diagnostic criteria for PTSD and one participant did not. For clarity, the same participant who did not meet diagnostic criteria for PTSD at pre-intervention did not meet diagnostic criteria for PTSD at the 24-hour post-intervention timepoint.

Table 6: Pre-Intervention to 24-hour Post-Intervention - One Intervention

Measure name and number completed at pretest and posttest	M (SD) Pre-intervention	M (SD) 24-hour Post-intervention	Unbiased Cohen's <i>d</i>
DERS-SF Total (N=16)	54.91 (15.06)	54.25 (15.50)	0.04
<i>Strategies</i> (N=16)	9.19 (3.62)	10.06 (3.21)	0.24
<i>Non-acceptance</i> (N=16)	9.44 (3.98)	9.06 (3.92)	-0.09
<i>Impulse</i> (N=15)	7.00 (4.07)	7.00 (3.16)	0.00
<i>Goals</i> (N=15)	12.53 (2.83)	11.87 (2.33)	-0.24*
<i>Awareness</i> (N=16)	8.00 (3.54)	7.50 (4.13)	-0.12
<i>Clarity</i> (N=16)	8.31 (2.77)	8.06 (3.53)	-0.08
GSES (N=16)	26.65 (7.21)	25.19 (6.59)	-0.20
PANAS-SF-P (N=16)	28.06 (10.1)	27.25 (9.83)	-0.08
PANAS-SF-N (N=16)	32.58 (8.72)	33.25 (7.93)	0.08
PCL-5 (N=16)	50.62 (14.09)	49.07 (13.95)	-0.11
SCS (N=16)	23.63 (11.82)	22.38 (10.18)	-0.11

Note. Bolded text with an asterisk denotes a statistically significant effect size in the direction of improvement. Bolded text without an asterisk denotes a statistically significant effect size in the direction of worsening.

Pre-Intervention to 24-hour Post-Intervention – Two to Three Interventions

The following is a descriptive and effect size analysis of participants who attended two to three group interventions and completed both the pre-intervention and 24-hour post-intervention measures (following the second or third intervention attended depending upon attendance). Six participants completed all measures assigned. The pre-intervention and 24-hour post-intervention mean and standard deviation scores can be found in Table 7.

In sum, the effect size analysis of data collected 24 hours post-intervention suggested that attending two to three interventions was linked to improvements across multiple facets of emotion regulation. Two to three interventions had a small positive effect on the DERS-SF Awareness subscale ($d = -0.26$) and the DERS-SF Clarity subscale ($d = -0.41$), indicating somewhat improved emotional awareness and emotional clarity following two to three interventions. While a medium effect size was observed for the DERS-SF Goals subscale ($d = -0.54$) indicating less difficulty engaging in goal directed behavior. However, the intervention had a small effect on increasing the DERS-SF Strategies subscale ($d = 0.36$) and the PANAS-SF-N

($d = 0.2$), indicating somewhat increased challenges accessing emotion regulation strategies and somewhat increased negative affect. Finally, a large effect size was observed for the DERS-SF Impulse subscale ($d = 1.24$) indicating significantly increased impulse control difficulties after attending two to three interventions.

Six of the 12 measures assigned demonstrated trivial effect sizes. These measures included the DERS-SF Total ($d = -0.12$), DERS-SF Non-acceptance subscale ($d = 0.0$), GSES ($d = -0.09$), PANAS-SF-P ($d = 0.002$), PCL-5 ($d = 0.06$), and SCS ($d = 0.09$). Of note, one participant experienced a change in their PTSD diagnosis from pre-intervention to 24-hour post-intervention. At pre-intervention, all six participants met diagnostic criteria for PTSD and at 24-hour post-intervention following two to three interventions, five participants met diagnostic criteria for PTSD, and one did not.

Table 7: Pre-Intervention to 24-hour Post-Intervention - Two to Three Interventions

Measure name and number completed at pretest and posttest	M (SD) Pre-intervention	M (SD) 24-hour Post-intervention	Unbiased Cohen's d
DERS-SF Total (N=6)	43.5 (9.27)	42.08 (10.06)	-0.12
<i>Strategies</i> (N=6)	6.33 (2.25)	7.58 (3.41)	0.36
<i>Non-acceptance</i> (N=6)	6.17 (2.14)	6.17 (2.32)	0.00
<i>Impulse</i> (N=6)	4.50 (0.84)	6.17 (1.37)	1.24
<i>Goals</i> (N=6)	11.50 (3.39)	9.25 (3.68)	-0.54*
<i>Awareness</i> (N=6)	7.00 (2.83)	6.25 (1.89)	-0.26*
<i>Clarity</i> (N=6)	8.00 (2.97)	6.67 (2.48)	-0.41*
GSES (N=6)	28.50 (6.03)	28.00 (2.37)	-0.09
PANAS-SF-P (N=6)	32.00 (8.27)	32.01 (4.30)	0.002
PANAS-SF-N (N=6)	26.67 (6.56)	28.17 (6.36)	0.20
PCL-5 (N=6)	40.77 (6.40)	41.25 (6.94)	0.06
SCS (N=6)	29.0 (10.06)	30.08 (9.33)	0.09

Note. Bolded text with an asterisk denotes a statistically significant effect size in the direction of improvement. Bolded text without an asterisk denotes a statistically significant effect size in the direction of worsening.

Pre-Intervention to One-Month Post-Intervention – One Intervention

The following is a descriptive and effect size analysis of participants who attended a single intervention and completed both the pre-intervention and one-month post-intervention

measures. Five participants completed the DERS-SF Total, DERS-SF Strategies subscale, DERS-SF Non-acceptance subscale, DERS-SF Awareness subscale, DERS-SF Clarity subscale, GSES, PANAS-SF-P, PANAS-SF-N, PCL-5, and SCS measures. While 4 participants completed the DERS-SF Impulse subscale and DERS-SF Goals subscale. The pre-intervention and one-month post-intervention mean and standard deviation scores can be found in Table 8 below.

The effect size analysis of data collected one-month post-intervention suggested that attending a single intervention was linked to notable improvements in multiple areas, including emotion regulation, perceived self-efficacy, negative affect, trauma symptoms, and social connectedness. Attending a single intervention had a small positive effect on the GSES ($d = 0.30$) indicating somewhat improved self-efficacy. A medium effect size was observed for the DERS-SF Strategies subscale ($d = -0.69$) indicating less difficulty accessing emotion regulation strategies, the DERS-SF Impulse subscale ($d = -0.61$) indicating less difficulty with impulse control, and the SCS ($d = 0.76$) indicating increased perceived social connectedness. The intervention had a large effect on the DERS-SF Total ($d = -0.8$) indicating significantly reduced difficulty with emotion regulation in general, the DERS-SF Non-acceptance subscale ($d = -1.7$) indicating significantly increased acceptance of emotional responses, the DERS-SF Goals subscale ($d = -1.16$) indicating significantly less difficulty engaging in goal directed behavior, the PANAS-SF-N ($d = -0.97$) indicating significantly reduced negative affect, and the PCL-5 ($d = -0.83$) indicating significantly reduced trauma symptoms.

Three of the 12 measures assigned demonstrated trivial effect sizes. These measures included the DERS-SF Awareness subscale ($d = 0.08$), the DERS-SF Clarity subscale ($d = -0.18$), and the PANAS-SF-P ($d = -0.01$). Of note, two participants experienced a change in their PTSD diagnosis from pre-intervention to one-month post-intervention. At pre-intervention, all

five participants met diagnostic criteria for PTSD and at one-month post-intervention following a single intervention, three participants met diagnostic criteria for PTSD and two did not.

Table 8: Pre-Intervention to One-Month Post-Intervention – One Intervention

Measure name and number completed at pretest and posttest	M (SD) Pre-intervention	M (SD) 24-hour Post-intervention	Unbiased Cohen's <i>d</i>
DERS-SF Total (N=5)	65.92 (14.99)	51.6 (13.63)	-0.8*
<i>Strategies</i> (N=5)	11.8 (3.96)	8.8 (2.95)	-0.69*
<i>Non-acceptance</i> (N=5)	13.6 (2.07)	8.6 (2.61)	-1.7*
<i>Impulse</i> (N=4)	9.0 (4.90)	5.75 (2.50)	-0.61*
<i>Goals</i> (N=4)	13.75 (1.50)	11.75 (0.96)	-1.16*
<i>Awareness</i> (N=5)	7.2 (4.60)	7.6 (3.36)	0.08
<i>Clarity</i> (N=5)	9.8 (2.78)	9.0 (4.30)	-0.18
GSES (N=5)	24.04 (10.60)	27.6 (7.96)	0.3*
PANAS-SF Positive (N=5)	27.6 (14.54)	27.4 (13.24)	-0.01
PANAS-SF Negative (N=5)	37.0 (6.96)	30.0 (4.30)	-0.97*
PCL-5 (N=5)	59.58 (11.89)	44.0 (17.55)	-0.83*
SCS (N=5)	14.0 (6.82)	21.8 (9.47)	0.76*

Note. Bolded text with an asterisk denotes a statistically significant effect size in the direction of improvement.

Pre-Intervention to One-Month Post-Intervention – Two to Three Interventions

The following is a descriptive and effect size analysis of participants who attended two to three group interventions and completed both the pre-intervention and one-month post-intervention measures following the final intervention attended. Four participants completed all measures assigned. The pre-intervention and one-month post-intervention mean and standard deviation scores can be found in Table 9 below.

The effect size analysis of data collected one-month post-intervention suggested that attending two to three interventions was linked to notable improvements on nearly all facets of emotion regulation, perceived self-efficacy, positive and negative affect, trauma symptoms, and social connectedness. Two to three interventions had a small positive effect on the DERS-SF Total ($d = -0.47$) indicating somewhat reduced difficulty with emotion regulation in general, the DERS-SF Strategies subscale ($d = -0.25$) indicating somewhat improved ability accessing

emotion regulation strategies, the DERS-SF Impulse subscale ($d = -0.48$) indicating somewhat less difficulty with impulse control, the DERS-SF Clarity subscale ($d = -0.43$) indicating somewhat improved emotional clarity, the GSES ($d = 0.41$) indicating somewhat improved self-efficacy, the PANAS-SF-P ($d = 0.25$) indicating somewhat increased positive affect, the PANAS-SF-N ($d = -0.24$) indicating somewhat reduced negative affect, the PCL-5 ($d = -0.33$) indicating somewhat reduced trauma symptoms, and the SCS ($d = 0.25$) indicating somewhat increased perceived social connectedness. A medium effect size was observed for the DERS-SF Goals subscale ($d = -0.53$) indicating less difficulty engaging in goal directed behavior and the DERS-SF Awareness subscale ($d = -0.51$) indicating improved emotional awareness.

One of the 12 measures assigned demonstrated a trivial effect size. This measure was the DERS-SF Non-acceptance subscale ($d = -0.04$). Of note, two participants experienced a change in their PTSD diagnosis from pre-intervention to one-month post-intervention. At pre-intervention, all four participants met diagnostic criteria for PTSD and at one-month post-intervention following two to three interventions, two participants met diagnostic criteria for PTSD and two did not.

Table 9: Pre-Intervention to One-Month Post-Intervention – Two to Three Interventions

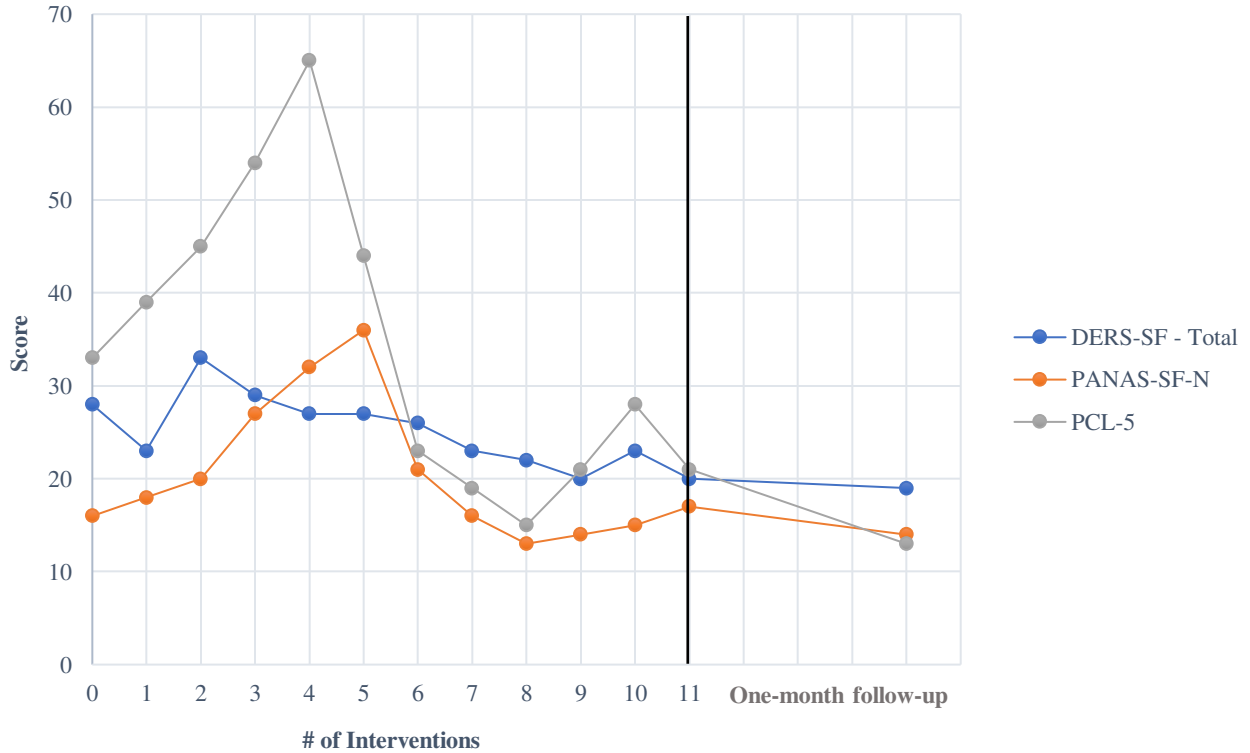
Measure name and number completed at pretest and posttest	M (SD) Pre-intervention	M (SD) 24-hour Post-intervention	Unbiased Cohen's <i>d</i>
DERS-SF Total (N=4)	55.0 (17.26)	45.25 (12.84)	-0.47*
Strategies (N=4)	10.0 (4.40)	8.75 (2.87)	-0.25*
Non-acceptance (N=4)	8.5 (5.00)	8.25 (4.19)	-0.04
Impulse (N=4)	9.5 (6.35)	6.25 (2.75)	-0.48*
Goals (N=4)	13.75 (2.50)	11.75 (2.99)	-0.53*
Awareness (N=4)	5.25 (2.87)	3.75 (0.96)	-0.51*
Clarity (N=4)	8.0 (2.45)	6.5 (2.65)	-0.43*
GSES (N=4)	24.56 (9.06)	28.25 (2.22)	0.41*
PANAS-SF Positive (N=4)	27.75 (8.02)	30.25 (6.70)	0.25*
PANAS-SF Negative (N=4)	35.25 (4.79)	32.97 (8.62)	-0.24*
PCL-5 (N=4)	47.24 (10.45)	40.25 (19.10)	-0.33*
SCS (N=4)	21.75 (15.02)	27.0 (15.12)	0.25*

Note. Bolded text with an asterisk denotes a statistically significant effect size in the direction of improvement.

Idiographic Analysis

Participant 1

Figure 1: DERS-SF – Total, PANAS-SF-N, and PCL-5



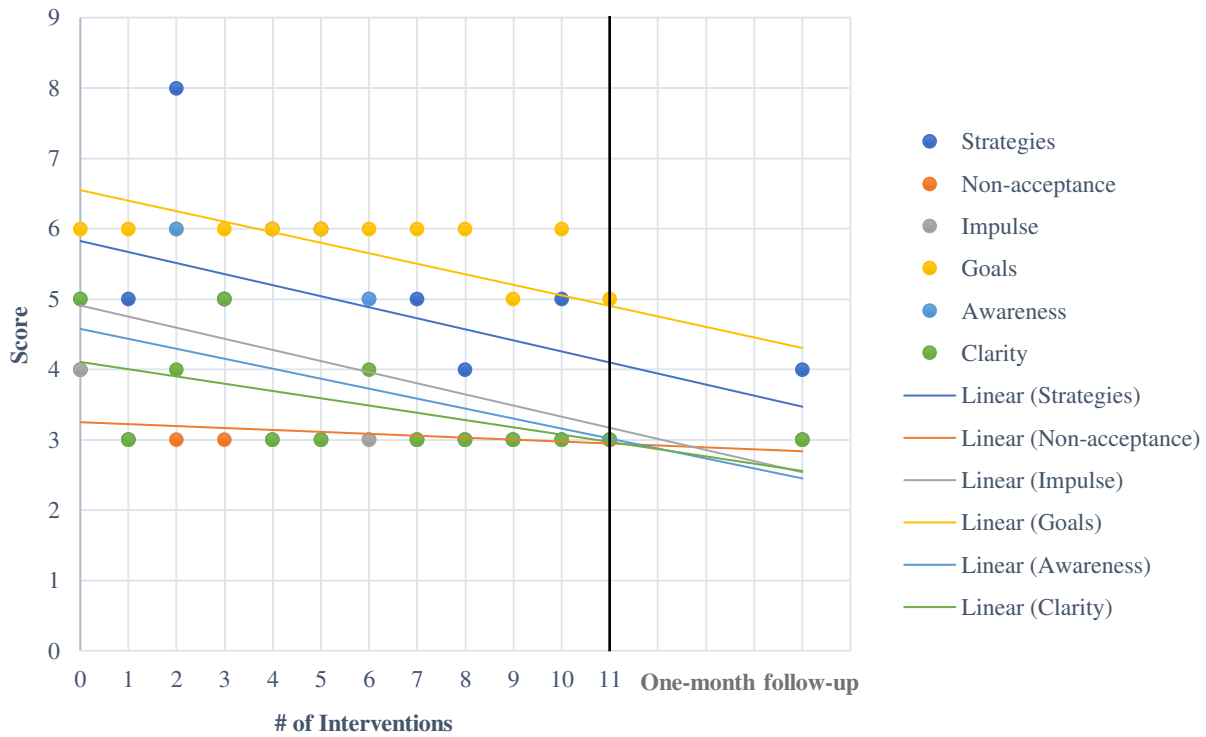
Note. The black bolded line at Intervention 11 indicates the final intervention attended.

Figure 1 demonstrates Participant 1's DERS-SF Total, PANAS-SF-N, and PCL-5 scores from pre-intervention to one-month post-intervention. This participant attended 11 interventions and completed the 24-hour post-intervention measures at each timepoint. At pre-intervention, Participant 1's DERS-SF Total score was 28 indicating minimal challenges with emotion regulation. Following the first session, this participant's score fell to 23 indicating improved ability to regulate emotions, but following intervention two their score increased to 33 indicating increased challenges with emotion regulation. For the remainder of interventions attended, Participant 1's scores demonstrated a steady decline with the exception of intervention 10, where their scores jumped from 20 at intervention nine to 23 at intervention 10. However, this participant's score dropped back down to 20 following intervention 11. At the one-month post-intervention follow-up, this participant's score decreased to 19 indicating negligible challenges with emotion regulation. From the pre-intervention to one-month post-intervention score, Participant 1 experienced a 9-point reduction in the DERS-SF Total indicating reduced difficulty regulating their emotions.

Participant 1's pre-intervention PANAS-SF-N score was 16 indicating minimal negative affect at baseline. This score climbed steadily to 36 following intervention five, and then showed a significant decline (PANAS-SF-N: 21) following intervention six. This participant's scores continued to display a steady decline until intervention eight (PANAS-SF-N: 13) and then increased minimally through the 11th and final intervention attended where they scored 17. At the one-month post-intervention follow-up, Participant 1's score demonstrated a reduction with a final score of 13 indicating negligible negative affect. In total, Participant 1 experienced a 3-point drop from their pre-intervention score to the one-month follow-up indicating a negligible reduction in negative affect over the course of treatment.

The pre-intervention PCL-5 score for Participant 1 fell at 33 indicating that they met diagnostic criteria for PTSD at this timepoint. This score climbed steadily to 65 following intervention four, and then showed a significant decline (PCL-5: 23) following intervention six. At this timepoint, Participant 1 no longer met diagnostic criteria for PTSD and for the remainder of treatment, their scores indicated subclinical PTSD symptoms. Participant 1's scores fluctuated minimally for the remainder of treatment, dropping as low as 15 following intervention eight and raising as high as 28 following intervention 10. Following the 11th and final intervention attended, Participant 1's score was 21 and demonstrated a consistent decline in the month following treatment with a final PCL-5 score of 13 at the one-month post-intervention follow-up. In total, Participant 1 experienced a 20-point reduction from their pre-intervention score to the one-month follow-up indicating a significant decrease in trauma symptoms.

Figure 2: DERS-SF Subscales



Note. The black bolded line at Intervention 11 indicates the final intervention attended.

Figure 2 demonstrates Participant 1's scores on the DERS-SF subscales (i.e., strategies, non-acceptance, impulse, goals, awareness, and clarity) from pre-intervention to one-month post-intervention. At pre-intervention, Participant 1's DERS-SF Strategies subscale score fell at 4 indicating minimal challenges accessing emotion regulation strategies. This participant's subscale score increased steadily to 8 following intervention two, and then fluctuated downward for the remainder of treatment. At the 11th and final intervention attended, Participant 1's score was 3. This score increased slightly at the one-month post-intervention timepoint (DERS-SF Strategies subscale: 4), thus demonstrating no change in accessing emotion regulation strategies from the pre-intervention score.

Regarding the DERS-SF Non-acceptance subscale, Participant 1's score was 4 at pre-intervention, suggesting minimal challenges accepting one's emotional responses. Following the first session, this participant's score decreased to 3 and then remained at this score for the remainder of treatment (i.e., 24-hour post-intervention measures 1-11). At the one-month post-intervention timepoint, Participant 1's score was 3 demonstrating a 1-point decrease from the pre-intervention score and suggesting slightly less difficulty accepting one's emotional responses following treatment.

At pre-intervention, Participant 1's DERS-SF Impulse subscale score fell at 4 indicating minimal impulse control difficulties. This participant's score decreased to 3 following the first session, and then steadily increased to 6 following intervention two. This score fluctuated downward following intervention three (DERS-SF Impulse subscale: 5), and then increased to 6 following interventions four and five. Following intervention six, the score decreased to 3 and remained at this score for the remainder of treatment. At the one-month post-intervention

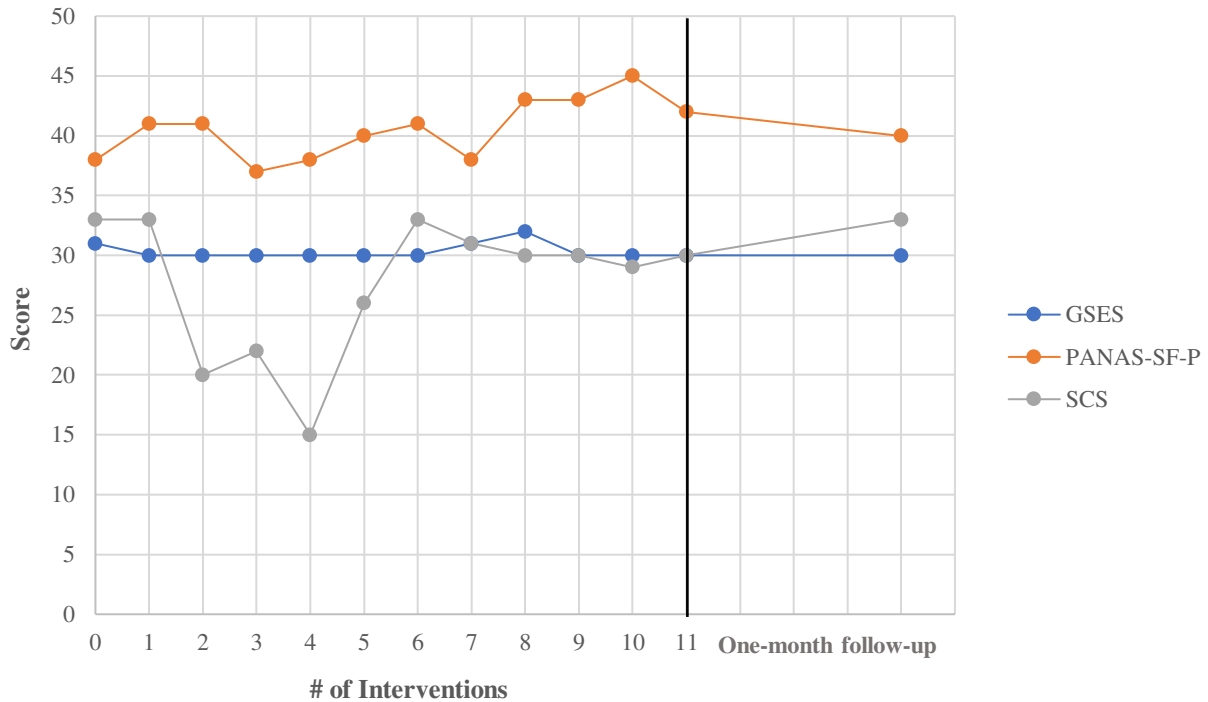
timepoint, Participant 1's score was 3 demonstrating a 1-point decrease from the pre-intervention score and suggesting slightly less difficulty controlling impulses following treatment.

Regarding the DERS-SF Goals subscale, Participant 1's score was 6 suggesting mild to moderate difficulty engaging in goal-directed behavior. This participant's score remained at 6 through intervention eight, but dropped to 5 following intervention nine. Following intervention 10, the score increased to 6 once again, but dropped to 5 following the 11th and final intervention attended. At the one-month post-intervention timepoint, Participant 1's score was 3 demonstrating a 3-point decrease from the pre-intervention score and suggesting fewer challenges engaging in goal-directed behavior following treatment.

At pre-intervention, Participant 1's DERS-SF Awareness subscale score was 5 indicating mild challenges with emotional awareness. This participant's score decreased to 3 following the first session, and then steadily increased to 6 following intervention two. The score steadily dropped to 3 following interventions four and five, increased to 5 following intervention six, and then decreased back to 3 for the remainder of treatment. At the one-month post-intervention timepoint, Participant 1's score was a 3 demonstrating a 2-point decrease from the pre-intervention score and suggesting less difficulty with emotional awareness following treatment.

Regarding the DERS-SF Clarity subscale, Participant 1's score fell at 5 suggesting mild difficulties with emotional clarity. Following the first session this score dropped to 3 and the next change was seen following intervention six (DERS-SF Clarity subscale: 4). Following intervention seven, the score decreased to 3 and then remained at this score for the remainder of treatment. At the one-month post-intervention timepoint, Participant 1's score was 3 demonstrating a 2-point decrease from the pre-intervention score and suggesting less difficulty with emotional clarity following treatment.

Figure 3: GSES, PANAS-SF-P, and SCS



Note. The black bolded line at Intervention 11 indicates the final intervention attended.

Figure 3 demonstrates Participant 1’s GSES, PANAS-SF-P, and SCS scores from pre-intervention to one-month post-intervention. At pre-intervention, Participant 1’s GSES score was 31 indicating moderately high perceived self-efficacy. Following the first session, their score dropped to 30 and then remained at this score until intervention seven where it increased to 31. Following intervention eight the score increased to 32, but by intervention nine the score dropped back down to 30 where it remained through Participant 1’s 11th and final intervention. The one-month post-intervention follow-up showed no change from the final intervention attended with a score of 30. In total, Participant 1 experienced a 1-point drop from their pre-intervention score to the one-month follow-up indicating a negligible reduction in their perceived self-efficacy.

Participant 1’s pre-intervention PANAS-SF-P score was 38 indicating moderately high positive affect at the start of treatment. This score climbed to 41 following interventions one and

two, and decreased to 37 following intervention three. From interventions three to six, their score increased steadily to 41 and then dropped slightly to 38 following intervention seven. Their scores increased steadily once again from interventions seven to 10, climbing as high as 45. At the 11th and final intervention attended they scored 42 and at the one-month post-intervention follow-up, Participant 1's score fell to 40. In total, Participant 1 experienced a 2-point increase from their pre-intervention score to the one-month follow-up indicating a negligible increase in positive affect over the course of treatment.

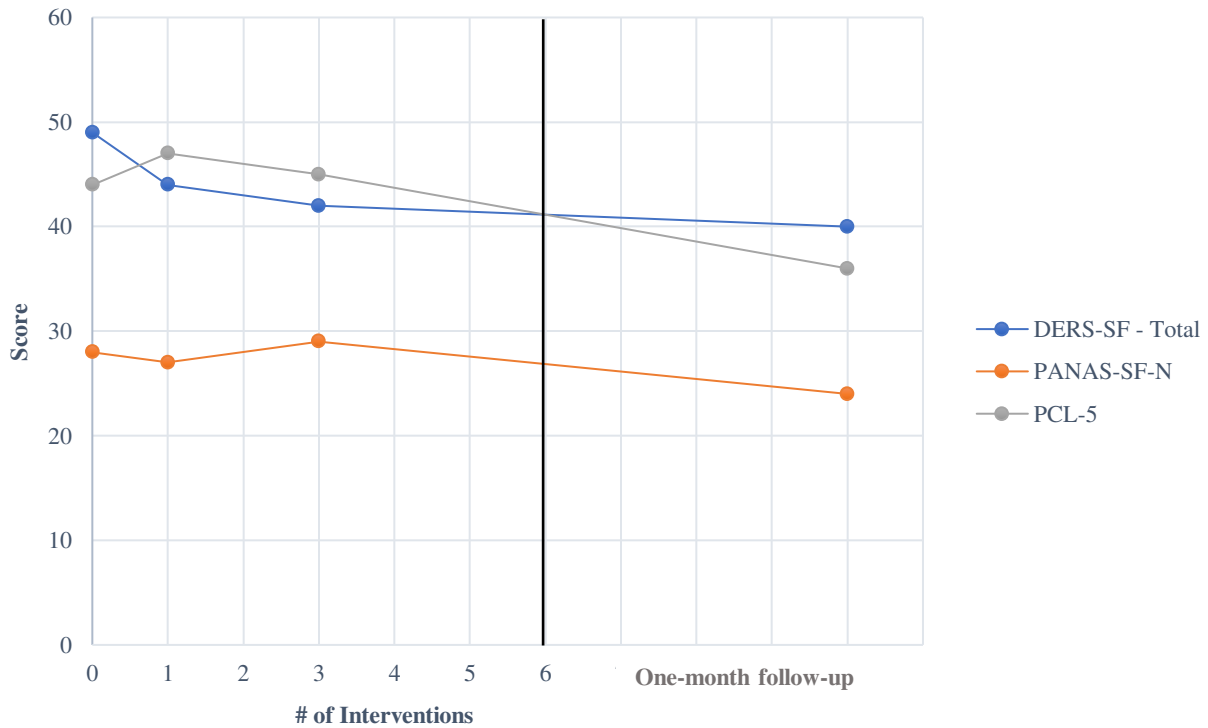
The pre-intervention SCS score for Participant 1 fell at 33 indicating moderately high perceived social connectedness. This score remained the same following the first session (SCS: 33) and then dropped significantly from interventions one to four (SCS: 15). From interventions four to six, Participant 1's score increased significantly indicating a return to baseline (SCS: 33). From interventions six to 10, their scores decreased minimally to a score of 29. At the 11th and final intervention attended they scored 30; at the one-month post-intervention follow-up, Participant 1's score climbed to 33. From their pre-intervention score to the one-month follow-up, Participant 1 saw no change in their perceived social connectedness.

Contextual Information. The following section is intended to offer contextual, qualitative information collected by the interventionist throughout the group intervention regarding Participant 1. Figures 1-3 consistently demonstrated a worsening in scores from the first session to interventions four or five on the DERS-SF Strategies subscale, DERS-SF Impulse subscale, DERS-SF Awareness subscale, PANAS-SF-N, PCL-5, and SCS. Throughout this period of Participant 1's attendance, they were engaged in the late stages of a contentious legal battle with their ex-spouse who had perpetrated IPV against them. The distress expressed by this participant as a result of these contextual factors may have influenced their scores during this

period. This participant was also engaged in individual trauma-focused treatment with another provider beginning approximately at the start of the current study’s group therapy program. Research suggests that at the beginning of treatment, participants with traumatic stress tend to experience a worsening in symptoms (Larsen et al., 2016). However, this worsening is temporary as treatment progresses and the benefits of treatment take hold. Therefore, Participant 1’s symptom exacerbation at the start of treatment could be related to these external factors experienced outside of the group intervention. Despite the contextual factors noted above, it is also possible that the group intervention contributed to Participant 1’s symptom exacerbation.

Participant 11

Figure 4: Episode 1 - DERS-SF – Total, PANAS-SF-N, and PCL-5



Note. The black bolded line at Intervention six indicates the final intervention attended during the first episode of care.

Figure 4 demonstrates Participant 11’s DERS-SF Total, PANAS-SF-N, and PCL-5 scores from pre-intervention to one-month post-intervention within their first episode of care. This

participant attended 6 interventions within this episode and did not complete all 24-hour post-intervention measures assigned, denoted by the missing data points at several interventions.

Participant 11 had a gap in their attendance for approximately six weeks between interventions six and seven, so their scores over time are split into Figures 4 (Episode 1) and 5 (Episode 2).

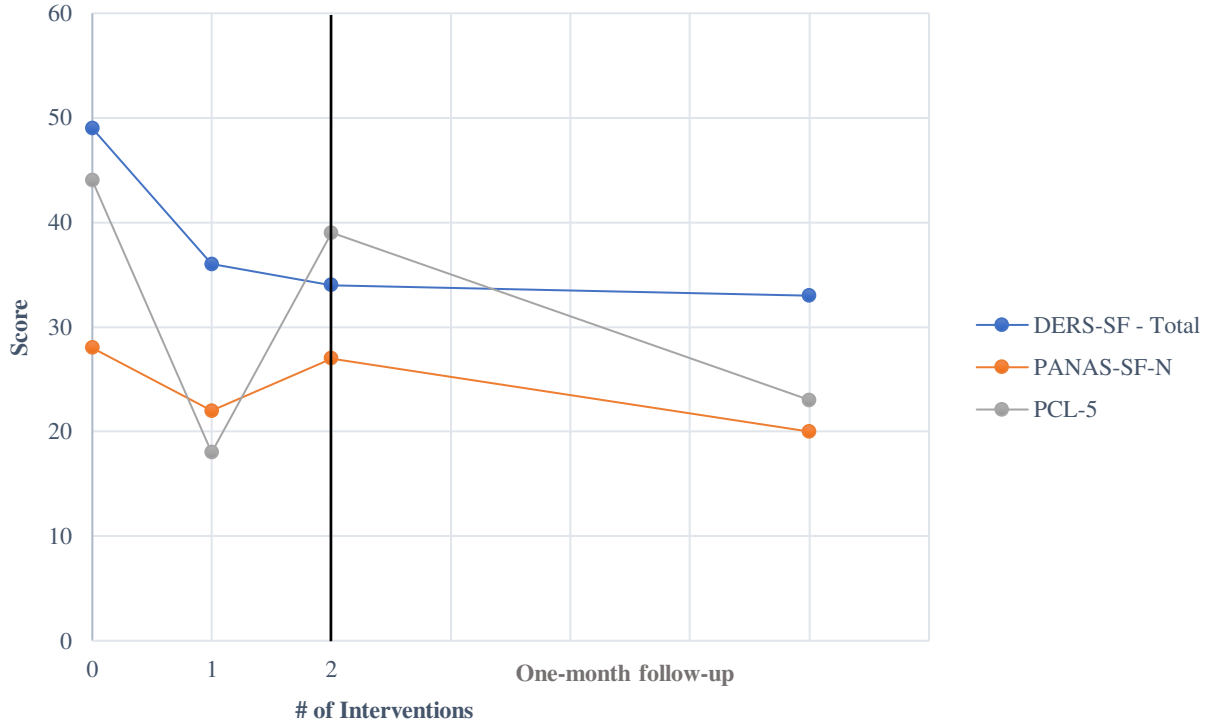
At pre-intervention, Participant 11's DERS-SF Total score fell at 49 indicating moderate challenges with emotion regulation. Following the first session, this participant's score decreased slightly to 44 and following intervention three their score decreased again to 42 indicating a mildly improved ability to regulate emotions. At the one-month post-intervention following intervention six, this participant's score had decreased to 40 indicating somewhat reduced challenges with emotion regulation. From the baseline to the one-month follow-up score, Participant 11 experienced a 9-point drop.

Participant 11's pre-intervention PANAS-SF-N score was 28 indicating moderate negative affect. This score decreased slightly to 27 following the first session, and then showed a negligible increase (PANAS-SF-N: 29) following intervention three. At the one-month post-intervention follow-up after intervention six, this participant's score decreased to 24 indicating a negligible reduction in negative affect over the course of treatment. In total, Participant 11 experienced a 4-point drop from their baseline score to the one-month post-intervention follow-up.

The pre-intervention PCL-5 score for Participant 11 fell at 44 indicating that they met diagnostic criteria for PTSD at baseline. Their score increased slightly to 47 following the first session, and then decreased slightly to 45 following intervention three. At the one-month post-intervention follow-up after intervention six, this participant's score had decreased to 36

indicating moderately reduced trauma symptoms. In total, Participant 11 experienced an 8-point drop from their baseline score to the one-month post-intervention follow-up.

Figure 5: Episode 2 - DERS-SF – Total, PANAS-SF-N, and PCL-5



Note. The black bolded line at Intervention two indicates the final intervention attended during the second episode of care.

Figure 5 demonstrates Participant 11’s DERS-SF Total, PANAS-SF-N, and PCL-5 scores from pre-intervention to one-month post-intervention within their second episode of care. This participant attended 2 interventions within this episode and completed all 24-hour post-intervention measures assigned. For reference, pre-intervention data were only collected one time prior to the first episode of care. These data were used again in Figure 5 to compare changes in scores from baseline through the second episode of care.

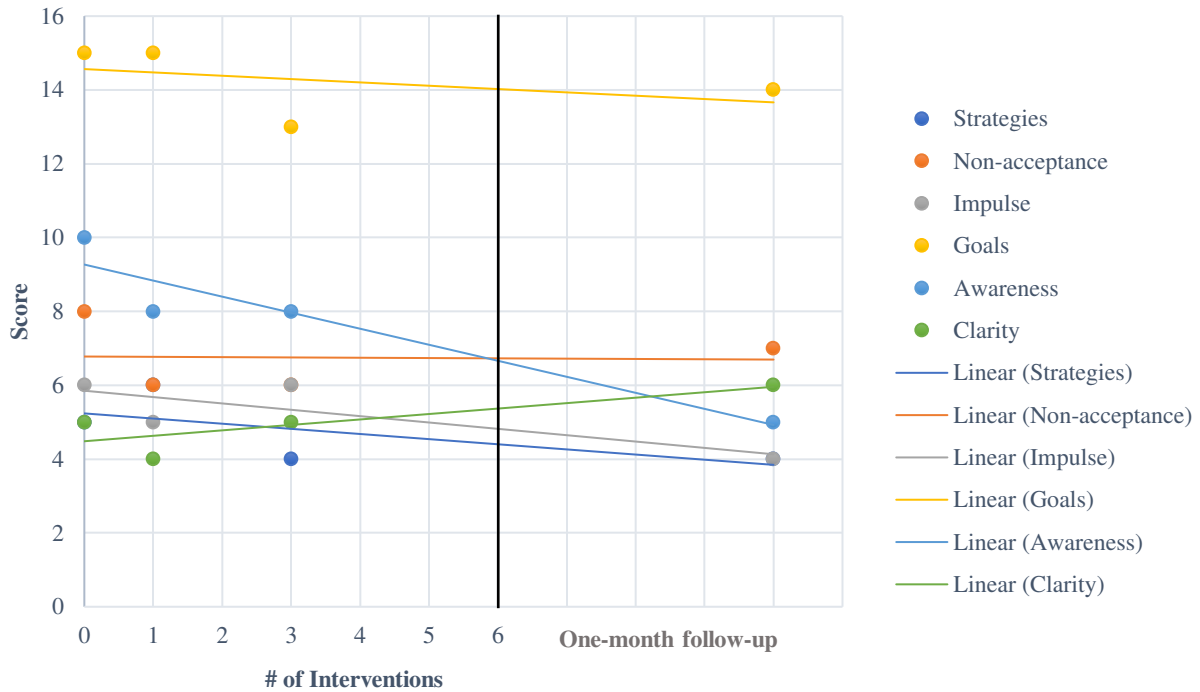
At pre-intervention, Participant 11’s DERS-SF Total score fell at 49 indicating moderate challenges with emotion regulation. Following the first session attended in this episode of care (seventh intervention in total), this participant’s score decreased to 36. Following intervention

two (eighth intervention in total) their score decreased once again to 34. Participant 11's score decreased to 33 at the one-month post-intervention timepoint following intervention two. From pre-intervention to one-month following intervention two (eight in total), Participant 11 experienced a 16-point drop indicating a significant reduction in emotion regulation challenges over the course of treatment.

Participant 11's pre-intervention PANAS-SF-N score was 28 indicating moderate negative affect. This score dropped to 22 following intervention one (seventh intervention in total), and then showed a notable increase (PANAS-SF-N: 27) following intervention two (eighth intervention in total). Participant 11's score decreased to 20 at the one-month post-intervention timepoint following intervention two. From pre-intervention to one-month following intervention two (eight in total), Participant 11 experienced an 8-point drop indicating a moderate reduction in negative affect over the course of treatment.

The pre-intervention PCL-5 score for Participant 11 fell at 44 indicating that they met diagnostic criteria for PTSD at baseline. Following the first intervention attended in this episode of care (seventh intervention in total), this participant's score decreased significantly to 18. At this timepoint, Participant 11 no longer met diagnostic criteria for PTSD. However, following intervention two (eighth intervention in total) Participant 11's score increased to 39, indicating that they once again met diagnostic criteria for PTSD. At the one-month post-intervention timepoint following intervention two, this participant's score decreased to 23. From pre-intervention to one-month following intervention two (eight in total), Participant 11 experienced a 21-point drop indicating a significant reduction in trauma symptoms over the course of treatment.

Figure 6: Episode 1 - DERS-SF Subscales



Note. The black bolded line at Intervention six indicates the final intervention attended during the first episode of care.

Figure 6 demonstrates Participant 11’s scores on the DERS-SF subscales (i.e., strategies, non-acceptance, impulse, goals, awareness, and clarity) from pre-intervention to one-month post-intervention within their first episode of care. This participant attended 6 interventions within this episode and did not complete all 24-hour post-intervention measures assigned, denoted by the missing data points at several interventions. As stated above, Participant 11 had a gap in their attendance for approximately six weeks between interventions six and seven, so their scores over time are split into Figures 6 (Episode 1) and 7 (Episode 2).

At pre-intervention, Participant 11’s DERS-SF Strategies subscale score fell at 5 indicating minimal challenges accessing emotion regulation strategies. This participant’s subscale score increased to 6 following the first session, and then dropped to 4 following intervention three. At the one-month post-intervention timepoint, Participant 11’s score was 4

demonstrating a 1-point decrease from the baseline score and suggesting slightly reduced challenges accessing emotion regulation strategies following treatment.

Regarding the DERS-SF Non-acceptance subscale, Participant 11's score was 8 at pre-intervention, suggesting moderate challenges accepting one's emotional responses. Following the first session, this participant's score decreased to 6 and then remained at this score following intervention three. At the one-month post-intervention timepoint, Participant 11's score was 7 demonstrating a 1-point decrease from the baseline score and suggesting slightly reduced challenges accepting one's emotional responses following treatment.

At pre-intervention, Participant 11's DERS-SF Impulse subscale score was a 6 indicating mild challenges with impulse control. This participant's score decreased to 5 following the first session, and then increased slightly to 6 following intervention three. At the one-month post-intervention timepoint, Participant 11's score dropped to 4 demonstrating a 2-point decrease from the baseline score and suggesting reduced challenges controlling impulses following treatment.

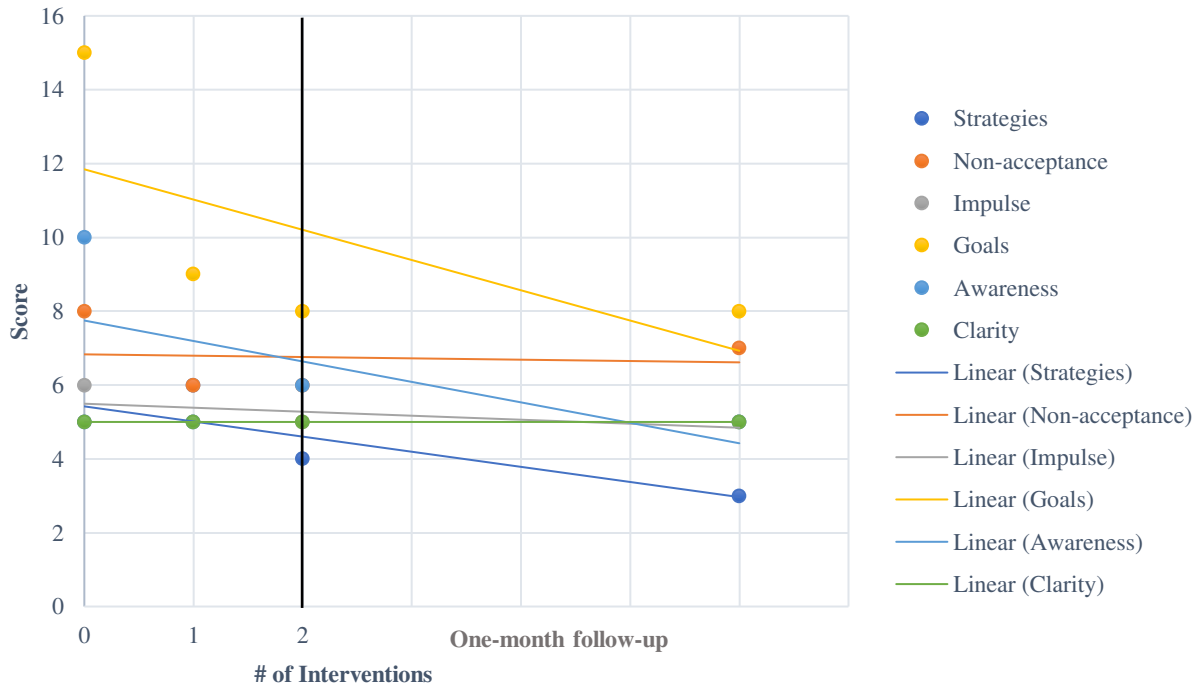
Regarding the DERS-SF Goals subscale, Participant 11's score was 15 suggesting significant difficulty engaging in goal-directed behavior. This participant's score remained at a 15 following the first session and dropped to 13 following intervention three. At the one-month post-intervention timepoint, Participant 11's score increased slightly to 14 demonstrating a 1-point decrease from the baseline score and suggesting slightly reduced difficulty engaging in goal-directed behavior following treatment.

At pre-intervention, Participant 11's DERS-SF Awareness subscale score was 10 indicating moderate challenges with emotional awareness. This participant's score decreased to 8 following the first session and remained at 8 following intervention three. At the one-month

post-intervention timepoint, Participant 11's score had decreased to 5 demonstrating a 5-point decrease from the baseline score and suggesting significant improvements in emotional awareness following treatment.

Regarding the DERS-SF Clarity subscale, Participant 11's score fell at 5 suggesting minimal difficulties with emotional clarity. Following the first session this score dropped to 4 and increased slightly to 5 following intervention three. At the one-month post-intervention timepoint, Participant 11's score was 6 demonstrating a 1-point increase from the baseline score and suggesting slightly increased challenges with emotional clarity following treatment.

Figure 7: Episode 2 - DERS-SF Subscales



Note. The black bolded line at Intervention two indicates the final intervention attended during the second episode of care.

Figure 7 demonstrates Participant 11's scores on the DERS-SF subscales (i.e., strategies, non-acceptance, impulse, goals, awareness, and clarity) from pre-intervention to one-month post-intervention within their second episode of care. This participant attended 2 interventions within this episode and completed all 24-hour post-intervention measures assigned. For reference, pre-

intervention data were only collected one time prior to the first episode of care. These data were used again in Figure 7 to compare changes in scores from baseline through the second episode of care.

At pre-intervention, Participant 11's DERS-SF Strategies subscale score fell at 5 indicating minimal challenges accessing emotion regulation strategies. This participant's subscale score increased to 6 following intervention one (seventh intervention in total), and then dropped to 4 following intervention two (eighth intervention in total). At the one-month post-intervention timepoint, Participant 11's score was 3 demonstrating a 2-point decrease from the baseline score and suggesting reduced challenges accessing emotion regulation strategies following treatment.

Regarding the DERS-SF Non-acceptance subscale, Participant 11's score was 8 at pre-intervention suggesting moderate challenges accepting one's emotional responses. Following one intervention (seventh intervention in total), this participant's score decreased to 6 and remained at this score following intervention two (eighth intervention in total). At the one-month post-intervention timepoint, Participant 11's score was 7 demonstrating a 1-point decrease from the baseline score and suggesting slightly reduced challenges accepting one's emotional responses following treatment.

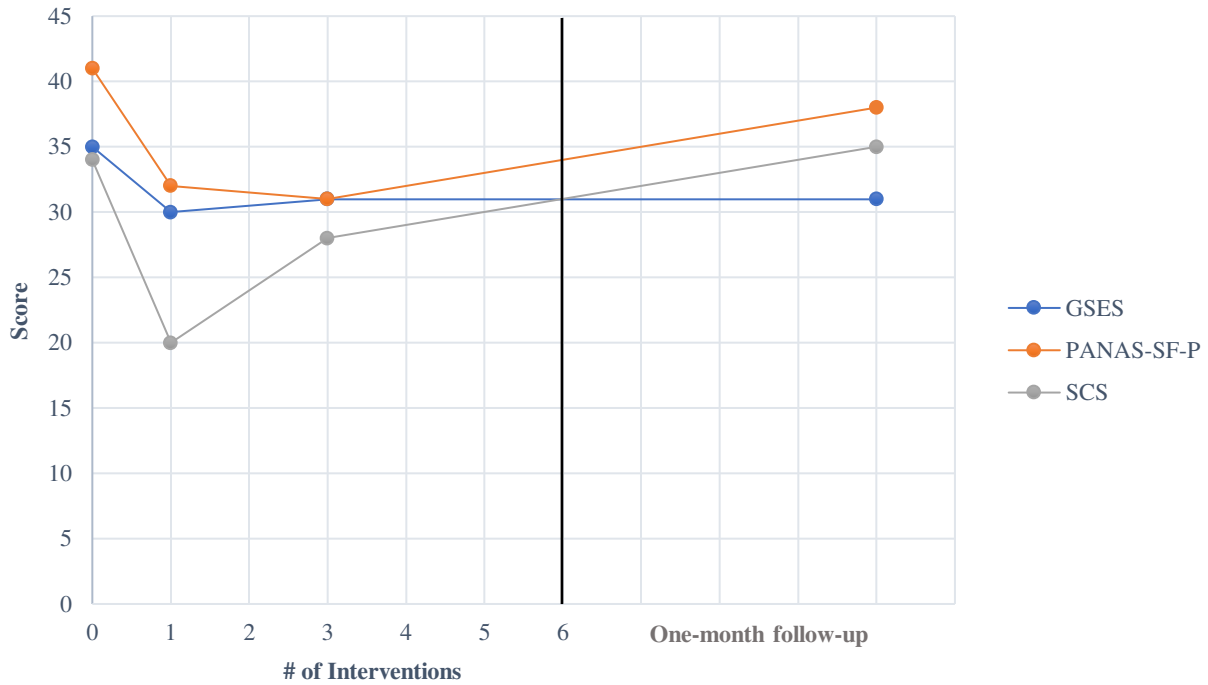
At pre-intervention, Participant 11's DERS-SF Impulse subscale score fell at 6 indicating mild challenges with impulse control. This participant's score decreased to 5 following intervention one (seventh intervention in total), and then remained at this score following intervention two (eighth intervention in total). At the one-month post-intervention timepoint, Participant 11's score remained at 5 demonstrating a 1-point decrease from the baseline score and suggesting slightly reduced challenges controlling impulses following treatment.

Regarding the DERS-SF Goals subscale, Participant 11's score was 15 suggesting significant difficulty engaging in goal-directed behavior. This participant's score dropped to 9 following intervention one (seventh intervention in total) and dropped to 8 following intervention two (eighth intervention in total). At the one-month post-intervention timepoint, Participant 11's score remained at 8 demonstrating a 7-point decrease from the baseline score and suggesting significantly improved ability engaging in goal-directed behavior following treatment.

At pre-intervention, Participant 11's DERS-SF Awareness subscale score was 10 indicating moderate challenges with emotional awareness. This participant's score decreased to 5 following intervention one (seventh intervention in total) and increased slightly to 6 following intervention two (eighth intervention in total). At the one-month post-intervention timepoint, Participant 11's score decreased once again to 5 demonstrating a 5-point decrease from the baseline score and suggesting significant improvements in emotional awareness following treatment.

Regarding the DERS-SF Clarity subscale, Participant 11's score fell at 5 suggesting minimal difficulties with emotional clarity. At interventions one (seventh intervention in total) and two (eighth intervention in total) this score remained at 5. At the one-month post-intervention timepoint, Participant 11's score was 5 demonstrating no change from the baseline score and suggesting no changes in emotional clarity following treatment.

Figure 8: Episode 1 - GSES, PANAS-SF-P, and SCS



Note. The black bolded line at Intervention six indicates the final intervention attended during the first episode of care.

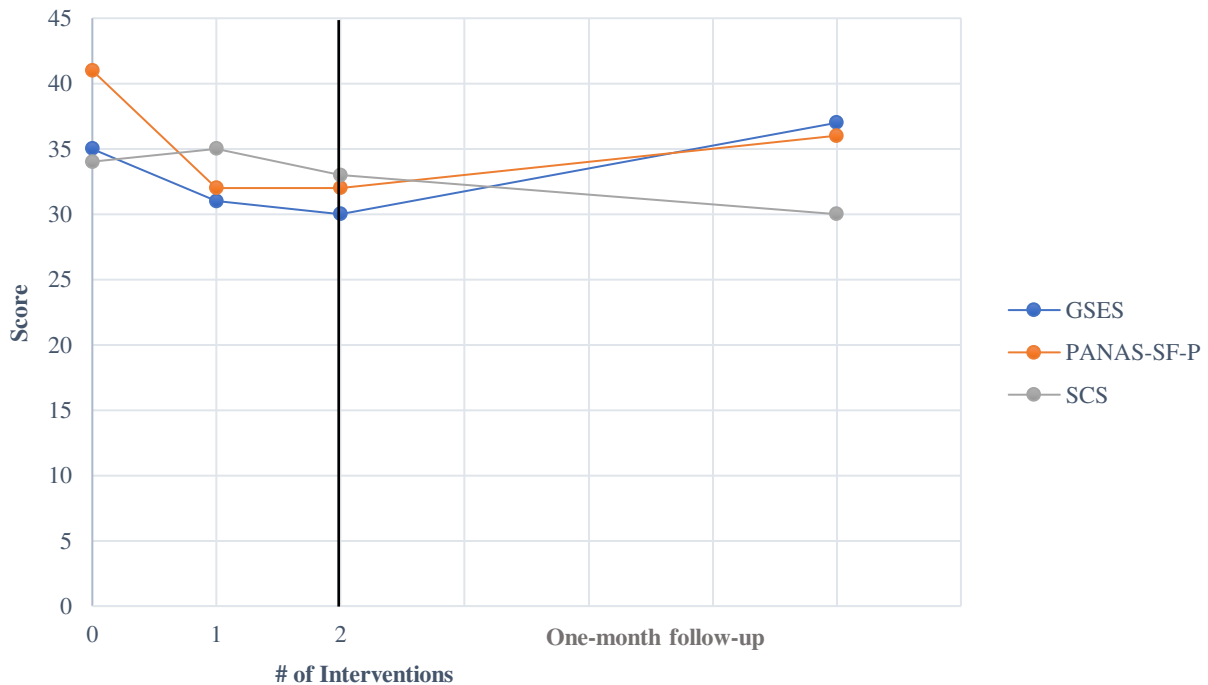
Figure 8 demonstrates Participant 11’s GSES, PANAS-SF-P, and SCS scores from pre-intervention to one-month post-intervention within their first episode of care. This participant attended 6 interventions within this episode and did not complete all 24-hour post-intervention measures assigned, denoted by the missing data points at several interventions. As stated above, Participant 11 had a gap in their attendance for approximately six weeks between interventions six and seven, so their scores over time are split into Figures 8 (Episode 1) and 9 (Episode 2).

At pre-intervention, Participant 11’s GSES score was 35 indicating high perceived self-efficacy. Following the first session, their score dropped to 30 and then increased slightly to 31 following intervention three. The one-month post-intervention follow-up showed no change from the final intervention attended with a score of 31. In total, Participant 11 experienced a 4-point drop from their baseline score to the one-month follow-up indicating a mild reduction in their perceived self-efficacy following treatment.

Participant 11’s pre-intervention PANAS-SF-P score was 41 indicating high positive affect at the start of treatment. This score dropped to 32 following the first session, and then decreased to 31 following intervention three. At the one-month post-intervention follow-up, Participant 11’s score increased to 38. In total, this participant experienced a 3-point decrease from their baseline score to the one-month follow-up indicating a slight reduction in positive affect over the course of treatment.

The pre-intervention SCS score for Participant 11 fell to 34 indicating moderate levels of perceived social connectedness. This score dropped significantly following the first session (SCS: 20) and then increased to 28 following intervention three. At the one-month post-intervention follow-up, Participant 11’s score climbed to 35. From their baseline score to the one-month follow-up, this participant experienced a 1-point increase suggesting negligible changes in perceived social connectedness.

Figure 9: Episode 2 - GSES, PANAS-SF-P, and SCS



Note. The black bolded line at Intervention two indicates the final intervention attended during the second episode of care.

Figure 9 demonstrates Participant 11's GSES, PANAS-SF-P, and SCS scores from pre-intervention to one-month post-intervention within their second episode of care. This participant attended 2 interventions within this episode and completed all 24-hour post-intervention measures assigned. For reference, pre-intervention data were only collected one time prior to the first episode of care. These data were used again in Figure 9 to compare changes in scores from baseline through the second episode of care.

At pre-intervention, Participant 11's GSES score was 35 indicating high perceived self-efficacy. Following intervention one (seventh intervention in total), their score dropped to 31 and dropped slightly once again following intervention two (eighth intervention in total; GSES: 30). At the one-month post-intervention follow-up, Participant 11's score showed a notable increase with a score of 37. In total, Participant 11 experienced a 2-point increase from their baseline score to the one-month post-intervention follow-up indicating a mild improvement in their perceived self-efficacy following treatment.

Participant 11's pre-intervention PANAS-SF-P score was 41 indicating high positive affect at the start of treatment. This score dropped to 32 following intervention one (seventh intervention in total), and then remained at 32 following intervention two (eighth intervention in total). At the one-month post-intervention follow-up, Participant 11's score increased to 36. In total, this participant experienced a 5-point reduction from their baseline score to the one-month follow-up indicating a mild reduction in positive affect over the course of treatment.

The pre-intervention SCS score for Participant 11 was a 34 indicating moderate levels of perceived social connectedness. This score increased slightly to 35 following intervention one (seventh intervention in total) and then decreased to 33 following intervention two (eighth intervention in total). At the one-month post-intervention follow-up, Participant 11's score

dropped to 30. From their baseline score to the one-month follow-up, this participant experienced a 4-point decrease suggesting a mild reduction in perceived social connectedness following treatment.

Contextual Information. The following section is intended to offer contextual, qualitative information collected by the interventionist throughout the group intervention regarding Participant 11. Figures 8 and 9 demonstrated a worsening in scores on the GSES, PANAS-SF-P, and SCS from pre-intervention through the final intervention attended in the second episode of care. Throughout this period of Participant 11's attendance, they experienced notable social difficulties. For clarity, following the IPV endured in their relationship, this participant experienced challenges receiving support from their family and social circle. The distress expressed by this participant as a result of these contextual factors may have reduced their scores during this period. It should also be noted that the improvement in scores shown at the one-month follow-up after intervention six, took place around the holidays which had increased Participant 11's social connection and perceived support. Therefore, Participant 11's symptom exacerbation on the GSES, PANAS-SF-P, and SCS throughout treatment could be related to their unique set of challenges following their exit from a relationship with IPV. Despite the contextual factors noted above, it is also possible that the group intervention contributed to this participant's worsening of symptoms.

Qualitative Analysis

24-Hour Post-Intervention Responses

A total of six short-response questions were asked at the 24-hour post-intervention timepoint. These questions examined participants' motivation for attending the intervention, the cultural appropriateness of the skills taught, and any recommendations for improvement. It

should be noted that several participants completed multiple 24-hour post-intervention measures as a result of attending multiple group interventions and thus were given the opportunity to complete the qualitative questions at this timepoint multiple times. To account for this, the interventionist analyzed data by participant to avoid falsely inflating the themes observed. Additionally, although participants were invited to respond to all qualitative questions asked at this timepoint, not all questions received responses from every participant. Consequently, some thematic data may be missing from this analysis.

1. What motivated you to attend the group therapy program at [partnering shelter's name] today? Six themes were identified within the 14 responses to this question. Nine participants reported the desire to heal or engage in self-help as reasons for attending, while five participants identified the desire to learn or build perspective as motivating factors. Seven participants identified community as their reason for attending, with one participant stating, *“This group is my most important and strongest form of community. If I don’t attend, I feel a loss of personal direction. When I do attend, my quest for self-preservation is reinforced.”* Additionally, two described their connection with the interventionist and one participant reported the opportunity to express their feelings as motivating factors. Of note, two participants identified passive reasons for attending group; these included a perceived commitment to the group or habit of attending as well as attendance following a recommendation from the partnering shelter.

2. Did you find that the skill(s) were appropriate for your culture or background? If yes, what parts felt appropriate? Fifteen participants answered yes, and zero participants answered no to question two. Regarding what parts felt appropriate, two participants described the practicality of the skills, one reported the applicability of the skills to their situation, and one

reported the variance in skills as appropriate for their culture or background. As for specific skills, one participant noted the Distress Tolerance skill of Self-Soothing, one noted the Interpersonal Effectiveness skill of Validation, one noted the Emotion Regulation skill of Accumulating Positive Emotions, and one noted the Distress Tolerance TIP skills. Although not related to the skills taught, one participant identified normalization from the group community, and another noted the attentiveness and tailoring of the skill by the interventionist as aiding in the appropriateness of the skills taught.

3. Did the group therapy intervention feel aligned with your values and/or beliefs? If yes, what parts felt aligned? Fifteen participants answered yes, and zero participants answered no to question three. When asked to elaborate, one participant identified normalization from the group community, one identified the interventionist, and one participant identified the nonjudgmental and nonreligious space offered. The final participant elaborated, *“There was no tie to a religious affiliation that was pushed onto attendees. Also, just being able to speak freely about my situation and not feel guilt or shame.”* Various participants described specific aspects of the skills that they found to be aligned with their beliefs and values. More specifically, three identified the insight building and learning components, two reported the mindfulness for anxiety relief, two described the prioritization of self-care, and one reported the eye contact-related skill associated with Opposite Action in the Emotion Regulation module.

4. Would you recommend this group therapy intervention to someone who shares your culture or background, or your values and/or beliefs? If yes, why would you recommend it? Fifteen participants answered yes, and zero participants answered no to question four. When asked to elaborate, three participants reported the community support and resulting lack of perceived isolation, six participants identified the effectiveness of the skills taught, and

two participants described the learning opportunity offered in group as reasons for recommending the group. Of note, one participant referenced their return to self, one participant described the relatable nature of the group, and one participant reported the interventionist as reasons for recommending the group. When one participant responded to why they would recommend the group to others they stated, *“Yes, I do [recommend the group] all the time. There is nothing like this group. This should be standardized and offered nationally.”*

5. How can the group therapy intervention be improved to better fit individuals sharing your culture or background, or your values and/or beliefs? Seven participants reported that no improvement was needed at this time, while four participants offered potential improvements. One participant suggested clear introductions at the start of the first session, and another recommended less focus on the surveys associated with the study. One participant who attended 11 group interventions and completed the qualitative questions at each timepoint recommended groups with more participants or one-on-one interventions with the interventionist, additional handout materials such as books, and longer intervention sessions. This participant elaborated, *“Longer sessions, perhaps. We start to dig in and time goes quickly. It feels abrupt when time is up.”* Finally, one participant mentioned that less teaching material should be presented in the group intervention for increased comprehension.

6. Is there any other feedback you would like to provide? When prompted for additional feedback, several strengths and recommendations for the group intervention were offered. Three participants described the interventionist as a strength of the group intervention, two reported the effectiveness of the skills taught in the group intervention, and one participant referenced the opportunity to speak freely as valuable. Regarding recommendations, one participant recommended a closed group format to aid in group cohesion and another reported

that some of the information was intimidating to absorb on their first visit. The participant who recommended a closed group format stated,

“It felt as if these sessions build on each other and I didn't know the other women as well as some of them knew each other. It would be better if the sessions were blocked off for a period of time so that everyone could get to know each other better. I think this is how [partnering shelter name] used to do it. I also think it would be helpful to know what resources are available outside of the support group (like a flyer or something) so attendees don't have to ask.”

The participant who attended 11 group interventions described in question five, recommended providing a group calendar for participants who regularly attend, spreading this treatment to more IPV victims and survivors around the country, and, for future participants they recommended attending the group intervention for an extended period of time.

Summary. The questions asked within this section fall into three distinct categories: the motivation for attending the group intervention, the cultural appropriateness of the group intervention, and recommendations for improving the group intervention. Regarding motivation for attending, six distinct themes were identified. These included a connection with the interventionist, the community offered by the group intervention, the desire to heal or engage in self-help, the desire to learn or build perspective, the opportunity to express one's feelings openly, and passive reasons (i.e., a habit or commitment to attending and a recommendation from the partnering shelter).

Regarding the cultural appropriateness of the group intervention, no recommendations for improvement were noted at this time and six distinct themes supporting the appropriateness of this intervention emerged from the data. The themes included a connection with the interventionist, the community and subsequent normalization offered within the group intervention, the insight and learning gleaned from the intervention, the effectiveness and applicability of the skills to one's needs, the lack of religious affiliation and nonjudgmental space

offered by the group intervention, and specific components of the skills, discussed in more depth in Questions 2 and 3 above. Although no recommendations for improving the cultural appropriateness of the group intervention were provided at this time, the sample was homogeneous in nature which limits this study's ability to answer this line of inquiry.

Finally, regarding recommendations for improving the group intervention, four distinct themes were identified. These included participant-related recommendations (i.e., more participants, closed group format for cohesion, and participation for an extended period of time), intervention structure recommendations (i.e., longer intervention sessions, introductions at the start of the intervention, and dissemination of a group calendar to all participants), material-related recommendations (i.e., additional reference handouts, less teaching material per intervention, and cognizance of the intensity of some of the teaching material), and dissemination of the group intervention to a broader audience.

One-Month Post-Intervention Responses

A total of nine short-response questions were asked at the one-month post-intervention timepoint. These questions related to utilization and effectiveness of the skills taught and general feedback for the group intervention. It should be noted that two participants completed two one-month post-intervention measures as a result of gaps in attendance. This was accounted for in the same manner as the above section, whereby the interventionist analyzed data by participant to avoid falsely inflating the themes observed. Additionally, although participants were invited to respond to all qualitative questions asked at this timepoint, not all questions received responses from every participant. Consequently, some thematic data may be missing from this analysis.

1. Did you use any of the DBT skills taught in the group therapy program attended at [partnering shelter name]? If yes, please briefly describe what skill or skills you used by

providing either the title of the skill or by using your own words to describe it. Seven participants answered yes, one participant answered sometimes, and zero participants answered no to question one. When asked to elaborate on what skills were used, one participant noted the Interpersonal Effectiveness skill of Validation, one noted the Emotion Regulation skill of Accumulating Positive Emotions, two noted the Emotion Regulation skill of Opposite Action, one noted the Mindfulness skill of “What” and two noted mindfulness in general. Another participant described, “[I] purposely recognize my current negative feelings and change my activities (exercise, call a friend, etc.)” following the group intervention. In relation to general skills, one participant described engaging in physical activity, one reported less avoidance of feared stimuli (i.e., going outside), and another reported engaging in self-care more broadly.

2. Please give an approximate number of how many times you used the skill or skills in the last four weeks. Also give an approximate number of how many times you used the skill or skills after the first group attended. When encompassing the last four weeks, one participant reported using the skill once, one participant reported using the skill eight times, three participants reported using the skills 10 times, three participants reported using the skills 12-16 times, and one participant reported using the skills taught every day. In reference to the number of times the skills were used following the first group attended, two participants indicated using the skills two to four times, two participants indicated using the skills 20-24 times, two participants reported using the skills “many times a month,” and one participant reported using the skill taught every day.

3. If you used a skill or skills taught in the group intervention, was it effective or helpful? Why or why not? Seven participants answered yes, and one participant answered no to question three. Regarding the participants who answered yes, one described that the skill taught

provided them with coping options, another reported that the skill gave them clarity, and three participants described experiencing symptom reduction as a result of the skills taught. One participant reported that the skill taught promoted self-love; they described, “*It gave me permission to love myself. The more I practiced, the better I felt.*” Although not in relation to the skills taught, one participant highlighted that having a space to vent was helpful for them. It should be noted that one participant reported that the skill was not helpful as it was received poorly by individuals within their social circle.

4. If the skill or skills were effective, what parts were the most effective or helped you manage your mental health symptoms the best? Two overarching themes were identified within this section of responses, skills for interpersonal relationships and skills for oneself. Regarding interpersonal-oriented skills, one participant reported increased communication and validation of others, while another referenced the prioritization of oneself in boundary setting as effective. Regarding skills for oneself, one participant identified the calming techniques taught, another referenced the helpfulness of changing their behaviors, and another discussed the helpfulness of self-validation. Finally, one participant elaborated, “*I reached out to more people for help, spent time with friends, started journaling, and [began] putting more time into my business.*”

5. If you used a skill or skills taught in the group intervention, and it was not effective or helpful, please describe your perception of why the skill was not helpful. One participant described the skill taught as unhelpful. This participant attended the group intervention when the Interpersonal Effectiveness skill of Validation was taught. They elaborated that the skill was unhelpful as it was not received well by individuals in their social circle. In

relation to the skill taught the participant reported, *“I think they were helpful for my understanding of what was happening but others [were] not listening.”*

6. If you did not use any of the DBT skills taught in the group therapy program attended at [partnering shelter’s name], why not? Two participants responded to the above question. One participant described that the skill was received poorly by people in their social circle and another participant reported that other individuals in their life did not use skills, resulting in reduced personal skill utilization. These responses imply that a lack of social support around skills use reduced several participants’ engagement with the skills taught.

7. What did you like about the DBT skills group taught at [partnering shelter’s name]? Five themes were identified within the responses of this section. Four participants identified the effectiveness of the skills taught, four noted the learning that they experienced, and two participants described the nonjudgmental, anonymous space as reasons they enjoyed the group intervention. One participant stated, *“[The group is] very open and accepting, [it’s an] anonymous program, and [it provides] extremely relevant information.”* Additionally, one participant described enjoying being the only participant in the group intervention one week.

8. What could be improved about the DBT skills group taught at [partnering shelter’s name]? Four participants reported that no improvement was needed at this time, while four participants offered potential improvements for the group intervention. One participant recommended a virtual option for attendance of the group intervention and recommended that all participants be sent the handouts over email following participation. Another participant recommended that the interventionist should provide education on other resources available, while a different participant recommended a clearer introduction for new participants attending the group intervention. The final participant referenced stated,

“Have a clearer welcome and explanation to first timers so they [can] catch the drift of how the group works. Let the first timer [go] to a quiet corner to do the survey so they are not trying to concentrate in the midst of other group conversation. Or let them do that first session and work with them on the survey afterward. The first session was very disorienting because I didn’t know the lay of the land.”

9. If you have any other feedback, please provide it at this time. When prompted for additional feedback, several strengths of the group intervention were identified. Two participants described positive experiences with the group leader and one participant reported the curriculum as strengths. The final participant stated, *“this is a great curriculum and the format worked remarkably well considering the in and out nature of participation.”*

Summary. The questions asked within this section fall into three distinct categories: type of skills used after the group intervention, effectiveness or ineffectiveness of the skills, and strengths of and recommendations for the group intervention. Regarding the type of skills used after the group intervention four themes emerged from the data. The themes included interpersonal effectiveness, emotion regulation, mindfulness, and general coping skills (i.e., physical activity, redirecting thoughts, etc.). Additionally, all participants reported using the skills taught following the group intervention.

Regarding effectiveness or ineffectiveness of the skills taught, five themes were identified in support of skill effectiveness and one theme was identified in support of skill ineffectiveness. The themes supporting skill effectiveness included providing the participant with coping options, providing the participant clarity, promoting self-love, aiding in symptom reduction, and providing the participant a space to vent. In addition, several participants identified specific components of the skills which aided in effectiveness, these included a variety of general coping skills (i.e., spending time with friends, journaling, behavioral activation, etc.), interpersonal effectiveness skills (i.e., increasing communication, setting boundaries, etc.),

validation of oneself and internal reassurance, and practicing the skills taught. In contrast, the theme which supported skill ineffectiveness was the resistance and lack of support from the participant's social circle.

Finally, regarding strengths and recommendations for improving the group intervention, six distinct themes described strengths and three distinct themes described recommendations for the group intervention. The themes supporting the strengths of the group intervention included the effectiveness of the skills taught, the learning gleaned from the intervention, enjoyment while attending the group intervention, the nonjudgmental and supportive space offered by the intervention, the anonymity offered by the group intervention, and a positive experience with the interventionist. The themes identifying recommendations for the group intervention included a participant-related recommendation (i.e., the opportunity for virtual attendance), material-related recommendations (i.e., receiving the reference handouts by email following the group intervention, education on other resources available to participants) and an intervention structure recommendation (i.e., introductions at the start of the intervention).

Discussion

The primary aim of the current study was to explore the relationship between a rolling-admission DBT skills group at a DV shelter and victims' and survivors' trauma symptoms, positive and negative affect, emotion regulation skills, self-efficacy, and perceived social connection. The secondary aim was to examine the impact of participant attendance on changes or lack thereof in participant scores. The third aim sought to qualitatively examine the motivation of participants attending the group intervention, the cultural appropriateness of the skills taught, the utilization and effectiveness of the skills taught, and recommendations for improvement. The fourth and final aim was to explore the utility of a rolling-admission DBT skills group format to determine whether this format better met the unique needs of victims and survivors of IPV in comparison to a closed group therapy format.

Summary

The main finding of the current study is that any amount of attendance in a rolling-admission DBT skills group was associated with qualitative benefits and quantitative improvements for participants' trauma symptoms, positive and negative affect, emotion regulation skills, self-efficacy, and perceived social connection. However, this finding varied by the timepoint at which data were collected and sessions attended. Within the effect size analysis at the 24-hour post-intervention timepoint, mixed results emerged likely influenced by measurement limitations, discussed below. At the one-month post-intervention timepoint, the findings suggested that participants who attended a single intervention showed fewer but larger beneficial effect sizes compared to those who attended two to three sessions. While participants who attended two to three sessions experienced a broader range of positive effects, though with

smaller effect sizes overall than those who only attended a single intervention. The idiographic analysis further demonstrated that two participants with the highest attendance (eight and 11 sessions, respectively) showed either no change or a slight worsening in some measures along with the observed benefits in other areas, suggesting that higher attendance alone was not associated with better outcomes. Thus, attendance did not affect scores such that participants who attended more interventions explicitly saw larger or more effects than those who attended fewer interventions.

Building on these quantitative results, the qualitative findings further revealed that a positive connection with the interventionist, the supportive community offered by the group, the learning opportunities offered, and the effectiveness and applicability of the skills taught were motivators for participant attendance. These factors also contributed to the cultural appropriateness of the intervention and were broadly identified as strengths of the group intervention. Another key finding within the qualitative data and interventionist's clinical observations was that the population studied was incredibly skillful prior to the group intervention. For this reason, psychoeducation and skill implementation problem-solving was of great value for skill utilization and effectiveness. Finally, the recommendations offered highlight the varying needs of participants by time since experiencing IPV-related stressors and symptom acuity.

Overall, the rolling-admission DBT skills group was a beneficial intervention for participants of the current study, as it aided in symptom reduction and offered qualitative value. This format met many participants' unique needs following exposure to IPV, but it should be noted that a rolling-admission approach was not as beneficial for participants who attended for

an extended period of time. A discussion of these findings and the practical implications based on the results of the current study are offered below.

Effect Size Analysis

Overall, the effect size analysis suggested that participants who attended any number of group interventions saw beneficial effects on most of the outcome measures at the one-month post-intervention timepoint. This finding is in alignment with previous studies which have demonstrated that DBT skills training was beneficial in the treatment of depression and anxiety symptoms, PTSD severity, hopelessness, interpersonal challenges, emotion dysregulation, and general psychiatric distress in victims and survivors of IPV (Arunagiri, 2021; Iverson et al., 2009; Lee & Fruzzetti, 2017; Newlands & Benuto, 2021; Teibowei, 2018). In the current study, those who attended a single intervention demonstrated fewer improvements (nine in total) but saw larger effect sizes on the measures compared to those who attended two to three sessions. While participants who attended two to three sessions showed more widespread benefits (11 improvements in total) on the measures, however, the effect sizes were generally smaller than those attending a single intervention. These findings partly diverge from the study's hypotheses, highlighting a more nuanced relationship between attendance and outcomes.

There are several possible explanations for the larger beneficial effects observed in participants who only attended a single intervention. First, it is possible that the DBT skills group intervention may have been the most applicable and effective for participants with recent exposure to IPV-related stressors and higher symptom acuity. Per the interventionist's observation, most participants who attended a single intervention were residing within the partnering shelter, had more recently experienced IPV-related stressors, and were in turn experiencing higher symptom acuity. Thus, these participants may have had fewer skills to

manage distress prior to the intervention, greater difficulty accessing skillful behaviors due to elevated distress levels, and/or increased motivation to practice the skills taught, compared to those attending two to three sessions.

Alternatively, a natural reduction in stress over time may have contributed to the effect size findings. According to Santiago and colleagues (2013), of those directly exposed to intentional traumatic stress or “the deliberate infliction of harm” (p. 2), 62.9% never develop PTSD and of the 32.1% who do, approximately one-third (34.8%) remit after three months. As observed by the interventionist, participants who attended a single intervention typically had more recent exposure to IPV-related stressors, resulting in higher symptom acuity at pre-intervention. It is then possible that those who attended a single intervention experienced more improvement in their scores at the one-month post-intervention timepoint as a result of a natural reduction in stress over time. Conversely, those who attended two to three group interventions tended to have more time-related distance since exposure to IPV-related stressors. This contextual factor resulted in lower pre-intervention distress levels, less symptom-related change at the one-month post-intervention timepoint, and consequently smaller overall effect sizes.

Another possible explanation for the results of the effect size analysis could be the impact of participants’ access to resources. The interventionist observed that participants residing in the DV shelter who attended only a single intervention often had recently moved into the shelter and were actively seeking the various resources offered through the partnering shelter. However, resources such as housing vouchers, educational scholarships, and legal support were typically provided within a few weeks of entry. Therefore, participants who attended only a single intervention may have had limited access to these resources at pre-intervention but gained access by the one-month post-intervention timepoint. The access to additional resources and support

could have reduced their symptom acuity, which in turn produced larger effect sizes overall on the outcome measures. This observation introduces the possibility that the skills-based intervention was less relevant to their immediate needs at the time of participation, potentially explaining why they did not return to the group but still demonstrated the most significant improvements.

Regarding participants who attended two to three interventions, lower levels of symptom acuity and various contextual factors may explain the smaller effect sizes seen. The interventionist observed that participants who attended two to three interventions typically did not reside in shelter, which provided them greater access to resources prior to the intervention. They also typically had more distance from IPV-related stressors, resulting in lower symptom acuity at baseline, and were generally focused on self- and symptom-related improvement. As a result of the lower symptom acuity and contextual factors observed, these participants' pre-intervention scores may have reflected less severity. Limited severity in scores at pre-intervention offered less opportunity for significant change at the one-month post-intervention timepoint resulting in smaller overall effects. These clinical observations may explain why a higher number of interventions attended (two to three interventions) did not result in effect sizes as large as those who only attended a single intervention. Thus, the group intervention may not have been less effective for participants who attended two to three interventions, instead the benefits may have been less observable given the outcome measures selected.

Regarding the 24-hour post-intervention timepoint, the data demonstrated mixed results likely due to poor measurement in the current study. The intervention employed was skills-based, therefore participants needed days if not weeks to implement and practice the skills taught in session. Benefits may also have been easier to acknowledge once positive effects from the

skills had been experienced or observed multiple times. The measurement employed in the current study at the 24-hour post-intervention timepoint did not allow for participants to practice the skills taught prior to completion of the outcome measures. It is therefore unlikely that participants would have received an immediate benefit from the group intervention; however, they may have experienced immediate benefit from the common factors and interpersonal support derived from the group. Due to the measurement challenges experienced at the 24-hour post-intervention timepoint, the analysis at the one-month post-intervention timepoint is a more accurate representation of the benefits of the group intervention in the current study.

When considering data from both the one-month and 24-hour post-intervention timepoints, several notable findings were observed within the effect size analyses. First, the DERS-SF Goals subscale exhibited the largest effect sizes across analyses as evidenced by small to large beneficial effects at all timepoints (i.e., a single intervention and two to three interventions at the 24-hour and one-month post-intervention timepoints). This is notable, as this was the only measure which saw a beneficial effect at the 24-hour post-intervention timepoint, suggesting that participants did not need to have time to practice the skills taught to see improvement in this domain, and simply attending the group intervention was enough to see a beneficial effect. Thus, any amount of attendance in the group intervention improved participants' perceived ability to engage in goal-directed behavior as soon as 24 hours following the group intervention.

Additionally, the DERS-SF Awareness and Clarity subscales saw small to medium beneficial effects only in participants who attended two to three interventions at both the 24-hour and one-month post-intervention timepoints. Conversely, participants who attended a single intervention saw no change in these subscales at both timepoints. This finding suggests that

awareness of and clarity regarding one's emotional experience was only achieved by attending more than one intervention, as attendance of a single intervention was not enough to produce change in these subscales. Finally, although the DERS-SF Strategies subscale worsened for those who attended a single intervention and two to three interventions at the 24-hour post-intervention timepoint, this subscale saw small to medium beneficial effects at the one-month post-intervention timepoint for both levels of attendance. This finding suggests that immediately following the intervention, participants perceived their ability to access emotion regulation strategies as worse than at pre-intervention. However, having the time and ability to practice the skills taught in the group intervention improved participants' perceptions of the strategies they had to regulate their emotional responses.

Idiographic Analysis

The idiographic analysis examined two participants who attended eight and 11 group interventions respectively. Findings suggested that the group intervention was effective at improving the DERS-SF Total, DERS-SF Goals subscale, DERS-SF Awareness subscale, and PCL-5 for both participants. Additional improvements were observed on the DERS-SF Clarity subscale for Participant 1 and the PANAS-SF-N for Participant 11. Over the course of treatment both participants' saw significant PCL-5 score improvements suggesting PTSD diagnosis remission for each participant. These findings indicate that higher levels of attendance in the group intervention (eight to 11 interventions) resulted in reductions in general emotion regulation difficulties, an improved ability to engage in goal-directed behavior despite experiencing challenging emotions, improved awareness of participants' emotional experiences, and notable reductions in participants' trauma symptoms. Higher levels of attendance also resulted in individual improvement on one participant's clarity regarding their emotional experience and

another participant's negative affect. Interestingly, higher attendance for these two participants did not result in significant improvements on the DERS-SF Strategies subscale, DERS-SF Non-acceptance subscale, DERS-SF Impulse subscale, GSES, PANAS-SF-P, or SCS.

It is important to note that Participants 1 and 11, similar to those who attended two to three interventions as discussed in the Effect Size analysis, did not reside in shelter which allowed them greater access to resources prior to the intervention. They also had more distance from IPV-related stressors, resulting in lower symptom acuity at baseline, and were generally focused on self- and symptom-related improvement. These contextual factors further support that participants who attended more than one group intervention typically had more access to resources and often saw smaller changes on the outcome measures due to less symptom acuity at pre-intervention.

Qualitative Analysis

The qualitative analysis shed light on participants' perceptions of the group intervention and its utility. Across questions and timepoints, a positive connection with the interventionist, the supportive community offered by the group, the learning opportunities offered within the group intervention, and the effectiveness and applicability of the skills taught were thematically significant. These themes were motivators for participant attendance, increased the cultural appropriateness of the intervention, and were broadly identified as strengths of the intervention. The importance of a connection with the interventionist and the community within the group aligns with psychotherapy research which suggests that the common factors (therapeutic alliance, empathy, client expectations/hope, the therapist's positive regard, and collaboration) account for most of the variance in positive client change in psychotherapy (Lambert, 1992). As such, future

research or practice in this area should not overlook the importance of a therapist harnessing the common factors in a supportive group therapy setting.

Regarding skill effectiveness, skills from all modules within DBT (mindfulness, emotion regulation, interpersonal effectiveness, distress tolerance) were mentioned as effective for participants. The skills taught were described as beneficial for participant well-being in a variety of ways and offered coping options for future distress. Interestingly, the only noted ineffective aspect of the skills taught was poor reception from the participant's social circle, which may suggest the importance of DBT Interpersonal Effectiveness skills for this population. Moreover, it was the interventionist's observation that the sample treated within this study was incredibly skillful, and some of the skills taught were already concepts that participants were familiar with. Thus, it is possible that victims and survivors of IPV already have a variety of coping skills at their disposal. As a result of this observation, the interventionist focused heavily upon psychoeducation (i.e., why and how the skills work, how these skills address symptoms experienced following IPV) and skill implementation problem-solving (e.g., when will you practice this skill, how will you remind yourself to use this skill, etc.). This strategy qualitatively improved participants' motivation to use the skills, increased the utilization of the skills taught, and offered problem solving for skill implementation.

Several important recommendations also arose from the qualitative findings. First, one participant recommended a closed group therapy format for group cohesion. Although only one participant recommended this shift, it is the observation of the interventionist that some participants may benefit more from this group format. Specifically, participants with more distance from IPV-related stressors who are seeking self- and symptom-related improvement. While those with more recent exposure to IPV-related stressors, more life instability (e.g.,

housing transitions, economic insecurity, etc.), and higher symptom acuity may benefit more from the rolling-admission group format, as this format meets participants current needs. Another key recommendation provided was to offer education on and access to other resources available to participants. Per the interventionist's observation, participants with more recent exposure to IPV-related stressors and thus a more recent connection to the partnering shelter, were often unaware of the community resources available to them. This resulted in a greater need for case management services to achieve stabilization in their life circumstances. In these circumstances, simply providing DBT skills training was an insufficient intervention.

Additionally, one participant recommended awareness of the intensity of the teaching material. For context, this participant had attended their first group intervention days after experiencing severe traumatic stress related to IPV. The IPV-related psychoeducation and skill applicability discussion provided by the interventionist was described as too intense for the participant. It is possible that participants with very recent exposure to traumatic stress related to IPV could benefit more from alternative treatment approaches instead of a DBT skills group. DBT skill building may require lower levels of active distress to promote cognitive engagement and learning, thus some participants in the immediate aftermath of exposure to traumatic stress may be unlikely to benefit from this intervention. Research within the traumatic stress field has demonstrated trauma-focused treatment effectiveness within two to four weeks following exposure to the traumatic stressor (Roberts et al., 2019). Thus, for participants with recent exposure to the traumatic stressor, CBT-T treatment is recommended over DBT skills teaching. Despite these recommendations, client preference in a therapeutic setting should be prioritized irrespective to other factors, as several studies have demonstrated the importance of preference in

achieving successful outcomes and reducing dropout (Greenberg & Goldman, 2009; Swift et al., 2011).

Lastly, several participants deemed the group intervention to be culturally appropriate and no recommendations for improving the cultural appropriateness of the group intervention were provided at this time. However, these findings should be interpreted with caution as the sample was homogeneous in nature which limited this study's ability to answer this line of inquiry. Although the current study could not effectively answer this question, previous research has demonstrated the utility of DBT skills groups in treating victims and survivors of IPV who hold marginalized identities and reside in one country outside of the US (Arunagiri, 2021; Soto-Lopez, 2021; Teibowei, 2018), suggesting cultural appropriateness in some populations.

Practical Recommendations

The following are recommendations based upon the interventionist's clinical observations in conjunction with the quantitative and qualitative findings of the current study. It is recommended that a rolling-admission DBT skills group format be retained for victims and survivors of IPV residing in a shelter, those experiencing ongoing IPV, and more broadly those recently exposed to IPV-related stressors experiencing increased life transitions (e.g., housing insecurity, economic insecurity, etc.). This format meets the target population's unique needs and increases the accessibility of mental health care. Additionally, it is important that treatment for individuals at this stage offers case management services (e.g., connection to housing options, legal support, medical doctors offering low-cost or free care, job preparation, educational scholarships, etc.) in conjunction with the group intervention to aid clients in achieving life stability. The findings of the current study indicated that DBT skills training alone was an

insufficient intervention for individuals experiencing increased life transitions as a result of IPV; thus, case management services should be offered in conjunction to the intervention.

For individuals with more distance from IPV-related stressors who are seeking self- and symptom-related improvement, it is recommended that a closed DBT skills group format be prioritized. This format would allow for the DBT skills taught to build on each other as is intended within the DBT protocol (Linehan, 2014). A closed group format would also allow for group cohesion as well as trust between clients and with the interventionist to be built. However, for individuals at this stage with persistent trauma symptoms, CBT-T treatment is recommended (Roberts et al., 2019). CBT-T has been shown to be the most effective method at reducing trauma symptoms in victims and survivors of IPV (Arroyo et al., 2017; Karakurt et al., 2022; Trabold et al., 2020). In order to see symptom-related benefits, consistent attendance for approximately 12 weekly sessions and homework completion is required (Fordham et al., 2021; Kazantzis & Miller, 2022). For this reason, clients with more distance from IPV-related stressors, increased life stability, and those who are seeking self- and symptom-related improvement, will likely see the most symptom-related benefits from CBT-T.

For some individuals who have experienced traumatic stress as a result of IPV within the last two to four weeks, DBT skills training in a group format may not be an effective intervention. It is recommended that clients at this stage engage in collaborative treatment planning and that client preferences are prioritized. If appropriate and desired, DBT Distress Tolerance skills may be taught to aid clients in coping with high levels of stress. However, per the tenets of the common factors, the interventionist's clinical observations, and findings from Greenberg and Goldman (2009) as well as Swift and colleagues (2011), clients at this stage

should collaboratively guide the treatment process with the interventionist to promote a client-centered approach immediately following exposure to traumatic stress.

In all therapy formats recommended above, a connection with the interventionist and a supportive, nonjudgmental group therapy space should be treated as a foundational aspect of treatment. Although the DBT skills taught offered participants a variety of coping options to manage their distress, the common factors within treatment were the mechanism which allowed the intervention to be effective. Future interventions aimed at treating victims and survivors of IPV should prioritize this foundational aspect of psychotherapy. Moreover, it was the interventionist's observation that the sample treated within this study was incredibly skillful. It is therefore possible that this population may already possess a variety of adaptive coping skills. It is recommended that future DBT skills group interventions for this population focus on psychoeducation (i.e., why and how the skills work, how these skills address symptoms experienced following IPV) and skill implementation problem-solving (e.g., when will you practice this skill, how will you remind yourself to use this skill, etc.), as these approaches improved participants' motivation to use the skills, increased the utilization of the skills taught, and offered problem solving for implementing skills into participants' lives.

Limitations and Implications for Future Research

Several limitations of the current study should be discussed. First, the present study did not use a control group due to the exploratory and community-driven nature of this project. The lack of a control group makes it difficult to determine if observed changes were exclusively due to the group intervention. Extraneous variables such as housing or economic stability, education level, experiences with identity-related discrimination, and other factors may have contributed to participants' changes in scores or influenced the effectiveness of the intervention. Due to the

limited sample size in the current study, an analysis of extraneous variables was not undertaken. Despite this limitation, the effects observed were in alignment with most of the hypotheses of the present study and the results of comparable studies (Arunagiri, 2021; Iverson et al., 2009; Lee & Fruzzetti, 2017; Newlands & Benuto, 2021; Teibowei, 2018), which is promising. In order to address this limitation, future studies in this topic area should examine the effectiveness of a rolling-admission DBT skills group for victims and survivors of IPV in comparison to a control group. Conducting a randomized control trial will allow for participant score changes to be attributed to the group intervention itself versus other potential variables.

Additionally, the rolling-admission group therapy format, although beneficial for some participants, posed a challenge to data analysis. A majority of participants (57%) attended only a single group intervention, while the remaining participants (43%) attended two to 11 group interventions. Those who only attended a single group intervention likely benefitted from the rolling-admission format; however, this format could have negatively impacted group cohesion and social connectedness amongst participants. As reported in the qualitative analysis, one participant who attended a single group intervention described a desire for a closed group format to aid in group cohesion. Although a strength of the current study, rolling-admission group therapy formats may not allow for the skills taught to build on each other (as is typical in DBT; Linehan, 2014), may limit the relational depth between the therapist and clients, and may take up more time when accounting for introductions and adjustments to the group process for new members.

Future research in this area should compare rolling-admission and closed DBT skills group interventions to better understand which format is more effective and who benefits most from each format. It is recommended that rolling-admission DBT skills groups be used for

individuals residing in shelter or experiencing increased life transitions at the time of treatment. While closed group formats be implemented for victims and survivors of IPV with more life stability (i.e., housing and economic security) at the time of treatment. In the present study, those who attended more group interventions did not reside in shelter, but instead were receiving outpatient services from the partnering DV shelter.

Moreover, sampling bias may be present in the current study as recruitment methods were only employed at one DV shelter in northern Colorado. Residents of the northern Colorado area were demographically homogeneous in comparison to other parts of the United States (U.S. Census Bureau, 2023). This homogeneity was demonstrated in participants' reported sex, gender, race, ethnicity, and sexual orientation (see Table 3); limiting the diversity of participants. Additionally, many of the individuals who chose to participate in the current study had previous exposure to mental health treatment or may have had higher help-seeking behaviors, thus increasing the probability that participants had similar characteristics. As a result of these limitations, the representativeness and generalizability of the findings are not guaranteed.

Future research in this area should aim to collect a diverse and more representative sample to understand the effects of a rolling-admission DBT skills group intervention for victims and survivors of IPV holding different intersecting identities. It should be noted that several studies have examined this area thus far (Arunagiri, 2021; Soto-Lopez, 2021; Teibowei, 2018); however, similar to the current study, these investigations have had small sample sizes, limiting the conclusions that may be drawn from the results. A more comprehensive understanding in this area could determine the cultural appropriateness of DBT for victims and survivors of IPV from a variety of identity groups and may elucidate other treatment avenues for those with diverse intersecting identities who have experienced IPV.

Finally, the generalizability of the current study was affected by the small sample size. As a result of the limited resources of the present study and the geographic constraints of the recruitment process, the sample size was small causing the analyses to be underpowered. Compounding this challenge was the high rate of individual-level missing data likely caused by the systemic barriers faced by participants. These factors together affected the data analysis process and the author's ability to draw conclusions about some of the quantitative results. Studies aiming to expand upon the current study should recruit a larger sample. Addressing this limitation will ensure adequate power in the data analysis and allow for detection of a true effect. A larger sample size will also allow for a quantitative examination of the most useful and appropriate DBT skills for this population. It is possible that certain types of DBT skills (e.g., Emotion Regulation versus Distress Tolerance) or specific skills themselves (e.g., Opposite Action versus Accumulating Positive Emotions) may offer more usefulness for victims and survivors of IPV seeking treatment. An understanding of the most useful DBT skills could allow for more applicable skills teaching for participants attending a limited number of interventions in a rolling-admission style group.

It should be noted that the study limitations discussed within this section are common in research taking a CBPR informed approach (Collins et al., 2019). Although these limitations were considered deficiencies within the current study, a CBPR-informed approach offered several notable advantages, including the promotion of patient-centered research and practice, improved internal and external validity, and a more robust ethical research framework. For these reasons, the benefits of using a CBPR-informed approach outweighed the limitations outlined above.

Conclusion

The current study demonstrated that various levels of attendance in a rolling-admission DBT skills group at a DV shelter were associated with qualitative benefits and quantitative improvements for participants' trauma symptoms, positive and negative affect, emotion regulation skills, self-efficacy, and perceived social connection. Results of the present study also demonstrated that participant attendance impacted effects on the outcome measures selected. However, attendance did not affect scores such that participants who attended more interventions explicitly saw larger or more effects than those who attended fewer interventions. Building on these quantitative insights, the qualitative findings elucidated several positive qualities of the group intervention which increased the cultural appropriateness, enhanced participant motivation, and were broadly considered strengths of the group intervention itself. A variety of qualitative recommendations for the group intervention were also provided. Practical recommendations related to a rolling-admission versus closed group therapy format and specific interventions are offered based upon the findings of the present study and the interventionist's clinical observations.

These findings are an important contribution to the literature base examining psychotherapy treatment for victims and survivors of IPV. The present study highlighted the varying treatment needs of victims and survivors of IPV in relation to time since experiencing IPV-related stressors, symptom acuity, and life instability. More specifically, a rolling-admission DBT skills group in conjunction with case management services is recommended for victims and survivors of IPV residing in a shelter, those experiencing ongoing IPV, and those recently exposed to IPV-related stressors experiencing increased life transitions (e.g., housing insecurity, economic insecurity, etc.). This format meets the target population's unique needs and increases

the accessibility of mental health care. Additional recommendations for victims and survivors at different time points following IPV-related stressors, symptom acuity, and life instability are provided. It is the author's hope that this study can inform future psychotherapy treatment approaches for victims and survivors of IPV and future research investigating this line of inquiry.

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Appendices

Appendix A

Screening Questionnaire

Are you proficient in spoken and written English?

- Yes
- No

Are you 18 years of age or older?

- Yes
- No

Have you experienced domestic violence at any point in your lifetime?

- Yes
- No

Are you currently experiencing posttraumatic stress disorder symptoms (PTSD; e.g., nightmares, feeling jumpy or easily startled, avoiding people, places or activities, overwhelming memories of a distressing event, etc.)?

- Yes
- No

Are you capable of providing informed consent? Examples of things that may get in the way of providing informed consent include, active substance use, experiencing mania or psychosis, severe cognitive impairment, and others.

- Yes
- No

Appendix B

Colorado State University – Psychology Department Consent to Participate in Research

*Exploring the Utility of a Rolling Admission Dialectical-Behavior Therapy Skills Group for
Victims and Survivors of Domestic Violence*

Principal Investigator: Bradley T. Conner, PhD

Co-Principal Investigator: Madison Colley, M.S.

What if I have questions?

For questions or concerns about the study, you may contact Madison Colley at (970) 364-0114 or mlcolley@colostate.edu. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted, contact the CSU Institutional Review Board at: CSU_IRB@colostate.edu; 970-491-1553.

What is the purpose of the study?

The purpose of this research study is to examine the effectiveness of a group therapy intervention Dialectical-Behavior Therapy (DBT) in the treatment of posttraumatic stress disorder (PTSD) and other mental health symptoms experienced by victims and survivors of domestic violence. DBT is a research-supported therapy intervention which teaches behavioral strategies for regulating emotions, tolerating distress, functioning interpersonally, and engaging in mindfulness, all potentially beneficial techniques for the treatment and management of PTSD symptoms.

Why am I being invited to take part in this research?

You are being asked to participate in the study because you fit these criteria: at least 18 years of age, have experienced domestic violence, are currently experiencing PTSD symptoms, and are verbally proficient in the English language.

Where is the study going to take place and how long will it last?

The study will take place every Tuesday evening in the front conference room at Crossroads Safehouse from 5:30-7:30pm between September 2023 and February 2024. If you decide to volunteer to participate in this research, you will need to attend one intervention of the group therapy intervention. You will be asked to complete several assessments at the start of the first group therapy intervention that you attend which will take approximately 30 minutes. You will also be asked to complete several assessments within 24 hours of the end of each group therapy intervention attended which will take about 30 minutes on each occasion. Finally, you will be asked to complete these assessments one month after the final group therapy intervention attended which will take about 30 minutes. For participants who choose to attend multiple group therapy interventions with more than a one-month gap between interventions, you will be asked to continue completing post-interventions measures within 24 hours of the end of each group therapy intervention attended and one month after the final group therapy intervention attended.

However, as participation is voluntary and you can stop at any time, it is within your rights as a participant to refuse to complete any assessment measures.

What will I be asked to do?

If you volunteer to participate in this study, you will be asked to do the following: complete a set of pre-intervention measures prior to the first group therapy intervention attended (~30 minutes), take part in at least one group therapy intervention (~60 minutes), complete a set of post-intervention measures within 24 hours of the end of each group therapy intervention attended (~30 minutes each), and complete another set of post-intervention measures one month after the final group therapy intervention attended (~30 minutes). Therefore, if you attend one group therapy intervention, you will be asked to complete three sets of measures (i.e., the pre-intervention measures, post-intervention measures following the intervention, and post-intervention measures at one month following the intervention). For participants attending multiple group interventions, pre-intervention measures will only be completed prior to the first group intervention attended and not prior to any subsequent group interventions. However, post-intervention data will be collected following every group intervention attended by participants. The final post-intervention measures collected at one month following the final group intervention attended will only be collected one time. Therefore, for each additional group therapy intervention attended, participants will be asked to complete one additional set of measures. Participants attending one group intervention and completing all measures associated with the research study can expect to commit ~165 minutes in total. For participants attending more than one group, the time commitment will increase by ~90 minutes per extra group attended.

If you choose to participate in the research study, you will be asked to provide personally identifiable information (PII). PII that will be collected as a part of this research study will include date of birth, phone number or email address, date of the group intervention(s) attended, and demographic information (age, race, ethnicity, sexual orientation, gender identity, etc.). However, participation in the research study is not required to take part in the group therapy intervention. Those wishing to simply participate in the group therapy intervention, and not complete the research requirements (i.e., completion of the pre- and post-intervention assessment measures) will be allowed to do so. If you wish to only take part in the group therapy intervention and not complete any of the research requirements, please notify the interventionist, Madison Colley (contact information above).

Are there any benefits from taking part in this study?

There may be no direct benefits for participants. However, prior work has shown that DBT may potentially help participants to cope with mental health symptoms, learn new skills for managing mental health symptoms, and foster social connections with other group members. Moreover, information from this study could inform other treatment options for other victims and survivors of domestic violence in the US.

What are the possible risks and discomforts?

During the group therapy intervention, some topics may cause you psychological discomfort or emotional distress. You have the ability to leave the group, omit information, take a break, stop participation in the group intervention and/or study at any time, skip any questions on the given

assessments, and/or withdraw your data entirely. Following the completion of each group therapy intervention, participants are able to request a list of mental health referrals in your location of residence.

Will I receive compensation for taking part in this study?

You will be compensated for participating in this research. You will not be compensated for group attendance but will be compensated for completion of the given assessments at each of the timepoints. You will be compensated at a rate of \$20/hour for the assessments completed. So, if you attend one group, complete the pre-intervention assessments, post-intervention assessments following attendance, and post-intervention assessments at the one-month timepoint, you will be paid approximately \$30. The maximum amount a participant can receive for attending the one group therapy intervention and completing all of the assigned measures (i.e., one set of pre-intervention measures, one set of post-intervention measures completed within two hours of the end of the group therapy intervention attended, and one set of measures completed one month after the final group therapy intervention attended) is \$30. An additional \$10 will be paid to participants for each additional group therapy intervention attended and completion of the post-intervention measures within 24 hours of the end of this additional intervention. Payment will take place via Visa Virtual gift card or cash given from staff to participants at the partnering shelter depending upon selection and delivery need. Compensation will be given at the completion of the study (i.e., approximately March 2024).

If participants withdraw from the study, they will receive prorated payment at the completion of the study as well. As an example, if a participant attends one group and only completes the set of pre-intervention measures, but not either set of the post-intervention measures, they will receive approximately \$10. If a participant attends one group and completes the set of pre-intervention measures and one set of the post-intervention measures, but not the final set of post-intervention measures, they will receive \$20. If a participant completes part of the measures on any occasion, the payment will be prorated to compensate them appropriately for their time. If a participant completes more than 75% of a set of measures on one occasion (i.e., pre-intervention, post-intervention following group, or post-intervention 1 month after the final group attended), they will receive the full payment of \$10. If less than 75% of a set of measures on one occasion are completed, the participant will receive the prorated payment of \$5. In order to receive the prorated payment of \$5, at least 25% of a set of measures on one occasion must be completed.

Who will see the information that I give?

All information gathered in this study will be kept as confidential as possible. Your privacy is very important to us, and the researchers will take every measure to protect it. Your information may be given out if required by law; however, the researchers will do their best to make sure that any information that is released will not identify you. No reference will be made in written or oral materials that could link you to this study. For this study, we will assign a code to your data so that the only place your name will appear in our records is on the consent and in our data spreadsheet which links you to your code. Only the research team will have access to the link between you, your code, and your data. All hard-copy records will be stored in a locked drawer inside of a locked room in a restricted-access office at CSU for three years after completion of the study. After the storage time, the information gathered will be destroyed. The rest of the study documentation (all data from the pre- and post-intervention measures) will be stored on the

Qualtrics platform (a HIPAA compliant platform built to collect research data); however, none of the data on this platform will be connected to personal identifying information. When data is removed from the platform for analysis, it will be stored in a password protected document which only the interventionist will have access to, on a private server. We may be asked to share the research files with the sponsor or the CSU Institutional Review Board ethics committee for auditing purposes. Your identity/record of receiving compensation (NOT your data) may be made available to CSU officials for financial audits.

Participation in a group therapy intervention involves some loss of privacy. The researchers will make every effort to ensure that information about you remains confidential but cannot guarantee total confidentiality. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. While we will ask all group members to keep the information, they hear in this group confidential, we cannot guarantee that everyone will do so.

Confidentiality will only be broken if you disclose that you are an imminent danger to yourself or others, if abuse occurring towards a protected population (e.g., children, elderly, those who are incarcerated, etc.) is disclosed, or if your records are subpoenaed by a court. If at any point one of these circumstances arise, the researcher will consult with the principal investigator and if deemed appropriate will contact 911 for immediate crisis support. Further, if a participant discloses sexual harassment, sexual assault, dating violence, or stalking at any time during the study and they are currently a student attending a university within the United States, the co-Principal Investigator may be mandated by Title IX to report this information. Before reporting, the co-Principal Investigator will consult with the participant and the Principal Investigator to determine if reporting is necessary in this circumstance. For further information regarding mandatory reporting and Title IX, please access the following website (<https://sites.ed.gov/titleix/policy/#fact-sheet>).

Do I have to take part in this study?

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with CSU. You are encouraged to ask questions about this study at the beginning or any time during the research study. You are also able to engage in the group therapy intervention without enrolling in the research component.

Will this data be used in future research?

Yes, it is possible that the data collected from you in this study will be used for future research studies or distributed to another investigator for future research studies without additional informed consent from you. However, all of your identifying information will be removed from the data.

Participant Consent

Checking the consent box acknowledges that you have read the information stated and voluntarily wish to participate in this research. This also acknowledges that you have received, on the date completed, a copy of this document containing four pages. If you no longer wish to participate in the group therapy intervention or the research study, please feel free to leave at any time.

___ Yes ___ No

Appendix C

Demographic Questions:

What is your age (in years)?

How do you define your Gender Identity? {Choose all boxes that apply} *Note the term Cisgender is often used for individuals whose sense of gender identity corresponds with the sex assigned to them at birth. The term transgender is often used for individuals whose sense of gender identity differs from their sex assigned at birth.

	Cisgender	Transgender	Other
Man			
Woman			
Gender Non-Binary			
Other			
Choose not to respond (select any box on this level)			

What was the sex assigned to you at birth? {Choose One}

- Male
- Female
- Intersex
- Another
- Do not wish to respond

How do you define your Ethnicity? {Choose one}

- Hispanic
- Latinx or Latine
- Not Hispanic or Latinx
- Another
- Do not wish to respond

How do you define your Race? {Choose all that apply}

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Another
- Unsure
- Do not wish to respond

Were you born in the United States (US)?

- Yes
- No (If no, please type which country you were born in below)

How do you define your Sexual Orientation? (Choose all that apply)

- Straight (heterosexual)
- Gay
- Lesbian
- Bisexual
- Queer
- Pansexual
- Asexual
- Questioning or unsure
- An identity not listed (Please specify below)
- Prefer not to disclose

What is your current marital status?

- Single, never married
- Widowed
- Married
- Separated
- Divorces
- Other (Elaborate below if desired)

Are you currently a parent?

- Yes (Please specify how many children you are currently parenting under the age of 18)
- No
- Other (If you would prefer to elaborate, please do so below)

Do you identify as a person with a disability or other chronic condition?

- Yes
- No
- Prefer not to say
- Other (If you would prefer to elaborate, please do so below)

What religion do you currently practice if any? (Choose all that apply)

- Protestantism and/or Christianity
- Catholicism
- Judaism
- Islam
- Hindu
- Buddhism
- Agnosticism or Atheism
- Spiritual
- Other (Please specify religion/denomination)

- None

What is the highest level of education you have achieved?

- Eighth grade or less
- Some high school
- GED
- High school graduate
- Business or technical training beyond high school
- Some college
- College graduate
- Some graduate or professional school beyond college
- Master's degree
- Doctoral degree

What was your gross annual income (before taxes) in the last year? Please only include the income that YOU earned in the last year, not you and a spouse.

- Less than \$5,000
- \$5,000-9,999
- \$10,000-14,999
- \$15,000-19,999
- \$20,000-24,999
- \$25,000-29,999
- \$30,000-49,999
- \$50,000 or more
- Other (If you would prefer to elaborate, please do so below)

What is your current employment status?

- Employed full-time
- Employed part-time
- Unemployed and looking for work
- Unemployed and not looking for work
- Retired
- Student
- Other (Elaborate below if desired)

What is your current housing status?

- I am residing at [partnering shelter]
- Housed and I am renting a space
- Housed and I own a space
- Unhoused or homeless
- Staying at a temporary residence that is not Crossroads Safehouse
- Other (Elaborate below if desired)

General Questions:

Are you currently seeing an individual or group therapist outside of the group therapy program at Crossroads Safehouse?

- Yes
- No, and not seeking services
- No, but currently seeking out services
- Other (Please specify below)

In the past, have you seen an individual or group therapist outside of the group therapy program at Crossroads Safehouse?

- Yes
- No, and never sought therapy services
- No; sought therapy services but never saw a therapist
- Other (Please specify below)

Are you currently taking psychotropic medication (i.e., medications used to treat mental health disorders)?

- Yes
- No, and not seeking out psychotropic medication
- No, but currently seeking out psychotropic medication
- Other (Please specify below)

In the past, have you taken psychotropic medication (i.e., medications used to treat mental health disorders)?

- Yes
- No, and never sought out psychotropic medication
- No; sought psychotropic medication, but never received or took it as prescribed
- Other (please specify below)

Approximately how many years have you experienced domestic violence in total? Please answer this question in number format.

Are you currently in a relationship with someone who has perpetrated domestic violence unto you?

Are you currently in a relationship with someone who has perpetrated domestic violence unto you?

- Yes
- No
- Other (Please specify below)

If no to the above question, how long has it been since you were able to leave the most recent relationship with domestic violence?

Appendix D

Difficulties in Emotion Regulation Scale- Short Form (DERS-SF)

Instructions: Please indicate how often the following apply to you.

- 1 = Almost Never (0-10%)
- 2 = Sometimes (11-35%)
- 3 = About Half of the Time (36-65%)
- 4 = Most of the Time (66-90%)
- 5 = Almost Always (91-100%)

1. I pay attention to how I feel.
2. I have no idea how I am feeling.
3. I have difficulty making sense out of my feelings.
4. I care about what I am feeling.
5. I am confused about how I feel.
6. When I'm upset, I acknowledge my emotions.
7. When I'm upset, I become embarrassed for feeling that way.
8. When I'm upset, I have difficulty getting work done.
9. When I'm upset, I become out of control.
10. When I'm upset, I believe that I will end up feeling very depressed.
11. When I'm upset, I have difficulty focusing on other things.
12. When I'm upset, I feel guilty for feeling that way.
13. When I'm upset, I have difficulty concentrating.
14. When I'm upset, I have difficulty controlling my behaviors.
15. When I'm upset, I believe there is nothing I can do to make myself feel better.
16. When I'm upset, I become irritated with myself for feeling that way.
17. When I'm upset, I lose control over my behavior.
18. When I'm upset, it takes me a long time to feel better.

Note: Subscale Scoring

1. Strategies: 10, 15, 18
2. Non-acceptance: 7, 12, 16
3. Impulse: 9, 14, 17
4. Goals: 8, 11, 13
5. Awareness: 1, 4, 6
6. Clarity: 2, 3, 5

Scales can be scored using sums or averages of items. Please note that all three items in the Awareness scale should be reverse coded. All subscales are scored so that higher values reflect greater difficulty with emotion regulation.

Appendix E

General Self-Efficacy Scale (GSE)

Instructions: Please indicate how true the following statements are for you.

- 1 = Not at all true
- 2 = Hardly True
- 3 = Moderately True
- 4 = Exactly True

1. I can always manage to solve difficult problems if I try hard enough.
2. If someone opposes me, I can find the means and ways to get what I want.
3. It is easy for me to stick to my aims and accomplish my goals.
4. I am confident that I could deal efficiently with unexpected events.
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.
6. I can solve most problems if I invest the necessary effort.
7. I can remain calm when facing difficulties because I can rely on my coping abilities.
8. When I am confronted with a problem, I can usually find several solutions.
9. If I am in trouble, I can usually think of a solution.
10. I can usually handle whatever comes my way.

Appendix F

Positive and Negative Affect Schedule – Short Form (PANAS-SF)

Instructions: This scale consists of a number of words that describe different feelings and emotions. Read each item then mark the appropriate answer in the space next to that word. Indicate to what extent you GENERALLY feel this way, that is, how you feel on the average.

1 = Very slightly or not at all

2 = A little

3 = Moderately

4 = Quite a bit

5 = Extremely

1. Interested.
2. Distressed.
3. Excited.
4. Upset.
5. Strong.
6. Guilty.
7. Scared.
8. Hostile.
9. Enthusiastic.
10. Proud.
11. Irritable.
12. Alert.
13. Ashamed.
14. Inspired.
15. Nervous.
16. Determined.
17. Attentive.
18. Jittery.
19. Active.
20. Afraid.

Note: Scoring

Positive Affect Score: Add the scores on items 1, 3, 5, 9, 10, 12, 14, 16, 17, and 19. Scores can range from 10 – 50, with higher scores representing higher levels of positive affect. Mean Scores: 33.3 (SD±7.2)

Negative Affect Score: Add the scores on items 2, 4, 6, 7, 8, 11, 13, 15, 18, and 20. Scores can range from 10 – 50, with lower scores representing lower levels of negative affect. Mean Score: 17.4 (SD ± 6.2)

Appendix G

The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Weekly

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully, and then indicate how much you have been bothered by that problem in the PAST WEEK.

- 0 = Not at all
- 1 = A little bit
- 2 = Moderately
- 3 = Quite a bit
- 4 = Extremely

1. Repeated, disturbing, and unwanted memories of the stressful experience?
2. Repeated, disturbing dreams of the stressful experience?
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?
4. Feeling very upset when something reminded you of the stressful experience?
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?
6. Avoiding memories, thoughts, or feelings related to the stressful experience?
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?
8. Trouble remembering important parts of the stressful experience?
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?
10. Blaming yourself or someone else for the stressful experience or what happened after it?
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?
12. Loss of interest in activities that you used to enjoy?
13. Feeling distant or cut off from other people?
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?
15. Irritable behavior, angry outbursts, or acting aggressively?
16. Taking too many risks or doing things that could cause you harm?
17. Being "superalert" or watchful or on guard?
18. Feeling jumpy or easily startled?
19. Having difficulty concentrating?
20. Trouble falling or staying asleep?

Appendix H

The Social Connectedness Scale

Instructions: Click the answer that shows how much you agree or disagree with each of the following statements.

1 = Strongly Agree

2

3

4

5

6 = Strongly Disagree

1. I feel disconnected from the world around me.
2. Even around people I know, I don't feel that I really belong.
3. I feel so distant from people.
4. I have no sense of togetherness with my peers.
5. I don't feel related to anyone.
6. I catch myself losing all sense of connectedness with society.
7. Even among my friends, there is no sense of brother/sisterhood.
8. I don't feel that I participated with anyone or any group.

Appendix I

Qualitative Questions

24-Hour Post-Intervention

1. What motivated you to attend the group therapy program at Crossroads Safehouse today?
Yes (if yes, what parts felt appropriate?)
No (if no, what parts felt inappropriate or did not align with your culture or background?)
2. Did you find that the skills were appropriate for your culture or background?
Yes (if yes, what parts felt appropriate?)
No (if no, what parts felt inappropriate or did not align with your culture or background?)
3. Did the group therapy intervention feel aligned with your values and/or beliefs?
Yes (if yes, what parts felt aligned?)
No (if no, what parts did not align with your values and/or beliefs?)
4. Would you recommend this group therapy intervention to someone who shares your culture or background, or your values and/or beliefs?
Yes (if yes, why would you recommend it?)
No (if no, why would you not recommend it?)
5. How can the group therapy intervention be improved to better fit individuals sharing your culture or background, or your values and/or beliefs?
6. Is there any other feedback you would like to provide?

One-Month Post-Intervention

1. Did you use any of the DBT skills taught in the group therapy program attended at Crossroads Safehouse?
2. If you answered yes to the above question, please briefly describe what skill or skills you used by providing either the title of the skill or by using your own words to describe it.
3. Please give an approximate number of how many times you used the skill or skills in the last four weeks.
4. Please give an approximate number of how many times you used the skill or skills after the first group attended. For individuals who attended group before September 2023, please consider your first group attended after September 1st, 2023.
5. If you used a skill or skills taught in the group intervention, was it effective or helpful? Why or why not?
6. If the skill or skills were effective, what parts were the most effective or helped you manage your mental health symptoms the best?
7. If you used a skill or skills taught in the group intervention, and it was not effective or helpful, please describe your perception of why the skill was not helpful.
8. If you did not use any of the DBT skills taught in the group therapy program attended at Crossroads Safehouse, why not?
9. What did you like about the DBT skills group taught at Crossroads Safehouse?
10. What could be improved about the DBT skills group taught at Crossroads Safehouse?

11. If you have any other feedback, please provide it at this time.